# A theological examination of contemporary deliberation about the development of new technologies, with reference to M. Heidegger, M. Foucault, and G. Grant : discovering our dwelling

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# A Theological Examination of Contemporary Deliberation About the Development of New Technologies, with Reference to M. Heidegger, M. Foucault, and G. Grant:

# Discovering our Dwelling

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# Abstract

This thesis deals with the ethical questions surrounding the development of new technology from the perspective of Christian theology. It is comprised of two parts.

Part I establishes that contemporary attempts to direct the development of new technology rely on ethical theories which systematically exclude relevant considerations. It traces Martin Heidegger's critique of such thought, which is then examined and elaborated by two of his interpreters, George Grant and Michel Foucault.

Heidegger speculates that the failings of modern ethical deliberation about technology reflect a deficit in conventional assumptions about the practical and social nature of all human action and knowing. Grant illustrates how this conceptual deficit leads to a univocity of practice which impoverishes social, political and technical practice. Foucault illustrates similar points by noting how technological practice undermines the human capacity for moral deliberation.

Part II attempts to develop a Christian description of the social and embedded nature of all human action which is rich enough to guide deliberation about new technology and is grounded in the reconciling and transforming work of God. It elaborates themes in Part I via the work of Bernd Wannenwetsch, Karl Barth and Augustine of Hippo.

Wannenwetsch argues that in worship we take part in a practice of praise and reconciliation which has a range of practical implications, including the transformation of several aspects of political life described in Part I. Barth meets the search of Part I for materiality itself to claim and shape our working by contending that in understanding how Sabbath specifies the doctrine of creation we may properly integrate our engagement with the material world (creation), our life with God, and human society. In a final chapter Augustine's doctrine of the two cities  provides the framework for understanding technology as guise of pride. In addition, this genealogy is reformulated via Barth's Trinitarian ontology to indicate how technologies may also be understood as part of God's work of redemption.

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## Select Abbreviations and Explanatory Notes

Common Abbreviations:

CD Barth, Karl. Church Dogmatics. Four volumes. Edited by G. W. Bromiley and T. F. Torrance. Edinburgh: T&T Clark, 1957-1961.

IVF *In vitro* fertilization

TA technology assessment

Explanatory Notes:

All biblical quotations are from the New Revised Standard Version.

# Introduction: Deciding to Make the World New

> Who gave us the sponge to wipe away the entire horizon? What were we doing when we unchained this earth from its sun? Where is it moving to now? Where are we moving to? …God is dead!…And we have killed him! …who will wipe this blood from us?… What festivals of atonement, what holy games will we have to invent for ourselves? … Do we not ourselves have to become gods merely to appear worthy of it?
>
> Friedrich Nietzsche[1]

It was perfectly clear to Friedrich Nietzsche that humans are not static entities but are beings on the way, beings shaped by perceptions and beliefs about their present and future relations. This thesis will not attempt to reestablish the psychological security Nietzsche tore away by asking about the death of God, but inquires with Nietzsche into the trajectory of human movement. This thesis asks the questions: To where are we moving? And, How do we dwell in our present? with a particular emphasis on decision-making about new technologies. The answers we find through this type of inquiry, Nietzsche believes, will shape and reshape our present behavior as we come to more fully know ourselves. The way these questions are asked and answered in contemporary moral deliberation about new technology will be outlined in this first chapter and will serve to focus the examination of contemporary life in the ensuing study.

In the course of that study we will often return to another aspect of Nietzsche's question: Who are the humans who dwell with [or are] gods, and what are they making? An initial image, found in first century Ephesus, serves to focus our imagination. We see a man, alone in a rather dark space, patiently toiling over a tool to shape a small piece of glittering metal. Through his patient scraping and burnishing an object is drawn forth from mind and hand. His happy concentration on the intricately engraved silver is broken

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[1] Friedrich Nietzsche, The Gay Science: With a Prelude in German Rhymes and an Appendix of Songs, ed. Bernard Williams, trans. Josefine Nauckhoff, poems trans. Adrian Del Caro (Cambridge: Cambridge University Press, 2001), bk. 3.125: 120.

by the interruption of the local gossip. Returning with a grimace to his work as the annoying chatter begins, Demetrius' disengagement turns to anger upon hearing that, "Paul was speaking out again today against Artemis." After another meandering few minutes of conversation, Demetrius dismisses the gossip and with a troubled brow returns to the fine and satisfying work of engraving. But a rising tide of irritation spoils his usual enjoyment of craftsmanship. Demetrius asks himself, "Do not we bring good to the people by constructing Artemis shrines? If Paul opposes our shrines, will he next oppose our engraved silver plate?" Yet the present impact on business of Paul's agitation is all too clear. At length Demetrius' angry perplexity gives way to resolution: "This questioning of our livelihood must stop, even if I myself must call a meeting to decide how us silversmiths will deal with this threat to our livelihoods."[2]

This ancient image might be paired with a contemporary analogue. Instead of a dark workroom, the scene is now a bright, window-encircled boardroom overlooking a sprawling city, where ten men in suits are seated around a long table deliberating about business strategy. Unlike Demetrius, their hands are not blackened by the manufacture process, because their words alone set to work the hands and machinery of a vast enterprise. We might find such groups in any number of similar buildings, and their remit is largely the same across the industrialized world: to produce computers, credit cards, petroleum, biotech products, national security, the whole panoply of manufactured goods, services and government. They steer a course for the future, shifting in the arrangements of funds, infrastructure and labor under their control, with the intent to rearrange the internal organization of their concerns and the products these concerns release into wider society. Within the limits of their resources, legal, and market constraints, such boards are free to act as they see fit to produce what they consider to be the most beneficial state of affairs for the entity they govern.

With such important decisions at stake, each board member naturally intends to pursue his work with conscientious meticulousness, thinking to himself he will do nothing rashly, confident in his own "prudence and considerateness whenever the safety of others is committed to my care." If at times the task demands exploratory or sweeping

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[2] Acts 19: 23-27.

rearrangement of the social or material arrangements of society they must not risk the welfare of their corporations with practical paralysis, but must at all times be sure of their own commitment to benevolence. Thus each man must be able to say to himself with a clear conscience, "[I] will not rashly encounter danger. I will be cool, persevering, and prudent."[3]

Demetrius the silversmith and our ten managers bear a clear awareness of their duties as part of the decision-making organ of a manufacturing concern. Among the many differences between the two forms of manufacture are their modes of deliberation about how to direct these concerns. Modern corporate and state managers have developed a highly formal method of moral deliberation in the hopes of maximizing the possible welfare they may produce by their decisions. Yet we cannot help but wonder: Does the presence of Christ, which caused Paul to so disturb the silversmiths of Ephesus, also break into and claim our ten men's deliberation?

### *New Technology, the Manager and the Language of Technology Assessment*

In order to ask whether contemporary deliberation about new technology might be interrupted and claimed by the creating and redeeming God, close attention must be paid to the lineaments of that deliberation. In our age the process of deliberating about and implementing new technologies has become a science in itself.

According to Ernest Braun[4] this science, known as technology assessment (TA), was coalesced at the request of the United States Congress, who systematized the diverse

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[3] Mary Shelley, Frankenstein: Or, The Modern Prometheus (London: David Campbell Publishers Ltd., 1992), 9, 11. Lest it appear to be a gratuitous slur to place the portentous words of Shelley's scientist on the lips of corporate and government managers, we might note that the "Bill Gates of Biotech" made the claim himself by referring to his work creating artificial life in these terms: "Shelley would have loved this!" Quoted in Kevin Davies, The Sequence: Inside the Race for the Human Genome (London: Weidenfeld & Nicolson, 2001), 110.

[4] "Despite the fact that [technology assessment and environmental impact assessment are] widely practiced throughout the globe, there is no generally accepted approach to which the terms 'technology assessment'

methods of making investment decisions of private firms. In the 1950 s and 1960 s Congress faced increasing pressure to coordinate national policy on technology. In 1972 it set up the Office of Technology Assessment to provide objective reports about the potential impacts of new technologies, so that development options could be prioritized to maximize investment and return. So conceived, TA served strategic planning on the assumption that technology is *one* of if not *the* principle weapon for both strategic and tactical maneuvering among competing entities.[5] An important linkage comes into view with this assumption: deeper tactical connections between the seemingly disparate projects of scientific exploration and technological "application", both of which are a function of policy objectives formulated and funded by managers. Many historical studies have traced the subsumption of science and invention conceived as free academic or entrepreneurial pursuits into managerial culture of industry and government. A watershed in this shift was the rise of the large techno-scientific projects of the second World War. Understanding this, we can see development of TA in 1972 as the maturation and rationalization of this shift in the culture of invention.[6]

Stated formally, TA is "*a systematic attempt to foresee the consequences of introducing a particular technology in all spheres it is likely to interact with.*"[7] Therefore,

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and 'environmental impact analysis' refer." K. S. Shrader-Frechette, Science Policy, Ethics, and Economic Methodology: Some Problems of Technology Assessment and Environmental-Impact Analysis (Dordrecht, Holland: D. Reidel Company, 1985), 12. In a field in which no clear spokesperson represents a consensus view, Braun's study (Ernest Braun, Technology in Context: Technology Assessment for Managers (London: Routledge, 1998) ) is a lucid and representative treatment of the central currents of a mature but not solidified discourse. Several journals are devoted to debating the details of the method, including Technology Assessment and The International Journal of Technology Assessment in Healthcare. The moral framework grounding the method is utilitarian consequentialism, which assumes the idealist maxim that the good can be impartially or "rationally" defined (either procedurally or by content) and thus costs and benefits can be balanced to reach an expedient political decision. See Shrader-Frechette, Science Policy, chapter two.

[5] Braun, Technology in Context, 26-30, 55-57.

[6] Mary Jo Nye, Before Big Science: The Pursuit of Modern Chemistry and Physics, 1800-1940 (Cambridge, Mass.: Harvard University Press, 1996).

[7] Braun, Technology in Context, 28.

continues Braun, TA is concerned with "*what effect different present actions and decisions might have upon the future*."[8] The task it sets itself is to understand the differing effects of incremental and radical innovations, to anticipate and plan for wide-ranging systematic changes in specific technology systems, and to foresee large-scale shifts in the general technological paradigm of society.[9]

Conceived as a social science, TA aims to be as objective as possible in presenting a balanced view of the possible futures a nation or company faces. Those who assess technology, Braun claims, "do not offer advice of the kind 'this ought to be done', but only of the kind 'if you wish to achieve this and that, the following instruments are at your disposal and may prove effective.'"[10] Whether in this specific case in this specific society we choose to inhabit or forego the future latent in a particular technology can only be a decision we make as part of the political process, claims Braun. "Technology assessment and democratic politics is as near as we can get to the ideal."[11]

In practical terms TA bears a close relation to dominant forms of economic science, attempting to produce a set of mathematical cost-benefit curves which have meaningful purchase on actual human behavior in the future. The methods of extrapolation, expert opinion, mathematical modeling, cost-benefit analysis, and cross-impact or environmental impact analysis are combined to create the most accurate picture possible of the future impacts of technology. Risk-cost-benefit analysis is the preeminent technique in this battery of conceptual and empirical tools, because it can deal with the widest number of variables and is favored by private industry because it emphasizes profit as a prime determinant in decision-making.[12] Such a method intends not only to rule out investments in new technologies which will not produce a dividend, but to indicate opportunities when the introduction of a new technology may be especially

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[8] Braun, Technology in Context, 109.

[9] Braun, Technology in Context, 14-15.

[10] Braun, Technology in Context, 38.

[11] Braun, Technology in Context, 157.

[12] Shrader-Frechette, Science Policy, 14-15.

profitable.[13] However, because TA deals with inherently unpredictable human social behaviors, in the end, Braun concludes, "Perhaps TA is more an attitude than a method—the attitude of attempting to take a holistic view of technology within its broad social setting."[14]

## The Conceptual and Moral Commitments of Technology Assessment

It is important to outline the basic commitments of TA as these will indicate a form of social grammar which will receive critical analysis in the course of this study. TA's subject is technology, understood as both a mode of production and the thing produced and used. As a thing produced, the focus of TA is technology defined as a combination of material artifacts (hardware) and the codified knowledge (software) which is immediately associated with it, the classic example being a railway system. Braun includes in his definition of technology those rules and procedures which are directly related to the operation of the technical system such as train scheduling, and maintenance procedures, but not those which are more peripheral, such as financial management, ticket sales or catering.[15]

Because technologies by definition intertwine with social systems, "We do know that technology will change and develop," Braun says, "but we do not know either the pace or the details of such developments."[16] Two major forces are accountable for this development. The first is the internal logic of science and technology—there is always more for science to discover, and technology to improve. The second force is economic. "Technology and its efficient use have come to take pride of place among the ingredients that determine competitive advantage and economic success of nations and enterprises."[17]

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[13] Ernest Braun, "Methods Useful in Technology Assessment," chapter five in Technology in Context.

[14] Braun, Technology in Context, 108.

[15] Braun, Technology in Context, 8-9, 12.

[16] Braun, Technology in Context, 109.

[17] Braun, Technology in Context, 13.

The manager's task is to foresee the shape of future developments in order to assure the competitive success of nations and corporations by knowing *which* technologies should be the subject of investment. Technology itself is understood to be neutral, capable of being used for good or ill, Braun says, and "How it is used depends largely on how it is managed, and to manage it well we need to look upon it with as broad and far-reaching a perspective as possible."[18] For the technology assessor the world is full of tangible but abstract social forces, amidst which strategic planning "is an attempt to steer a large organization toward a desired goal, instead of allowing it to be buffeted hither and thither by external forces. The steering can have only limited success, as external forces can neither be eliminated nor entirely predicted. Yet some success is attainable, and worth the effort."[19]

Braun warns that in the titanic struggle to steer a large organization in a complex social arena, managers must understand that the uncompetitive will suffer extinction. Thus their first priority must be the maintenance of a minimal level of profit, or capital improvement. Yet maintaining this minimum is complicated because there are limits to how this may be accomplished. For instance, a polluting corporation, or a nation who is seen to trade unfairly will lose trading power in the marketplace. Thus as a modification of the basic priority of survival managers must maintain their company's or nation's reputation for valuing those who cannot be protected, which includes the poor but means primarily a valuation of the truly voiceless, the environment.[20]

Not only is there a question of reputation at stake, Braun continues. Corporate or national managers are also the guardians of the public interest, and their aim must be to foster and control technology so as to maximize benefit and minimize harm to all who are impacted by their decisions. Again, the definition of benefits and harms are questions which can be resolved only by political agreement. Developed Western nations currently agree on basic minimum standards of harm: light, noise, smell, heat pollution, and the degradation of the environment are all of sufficient public concern to warrant their

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[18] Braun, Technology in Context, 1.

[19] Braun, Technology in Context, 55.

[20] Braun, Technology in Context, 83-84, 90.

inclusion as a significant cost of any new technology which exacerbates them.[21] Yet Braun articulates the consensus in the field of TA, arguing that the horizon is limitless in solving these social problems: "Problems are here to be solved, not to defeat us. But to solve them, some cherished old patterns of thought and habit may have to be discarded."[22]

The change in labor practices entailed in the introduction of a new technology also modifies the central focus on corporate survival, for policy makers have a responsibility to mitigate as much as possible the problems of deskilling and unemployment that technological change may create. Such responsibility is limited, indicates Braun, by the awareness that whole economic systems, which are the responsibility of the government policy makers, lie outside the scope of corporate managers, limiting their ability to protect labor.[23] Globalization creates a host of problems for the manager trying to steer a corporate entity, and thus a practical realism is in order. "Not only can advanced economies not hope to compete with developing countries in the production of undifferentiated staple products, they are powerless to protect the most oppressed workers and the most abused environments…This is not to say that employment in developing countries should be put in jeopardy—they need it badly—but that action against abuse of workers and against environmental degradation should be taken wherever possible."[24] While it is important for legislators to address the basic social and environmental problems which we all face, the best that corporate or government managers can hope for is a rational and politically acceptable balance of benefit and harm when implementing a new technology.

Braun indicates that the final consideration which the manager must take into account is the importance of optimizing the pace of technological change. Mangers must on one hand stay sufficiently abreast of new developments, but more importantly must also *limit* the rate of technological change, because when it proceeds too quickly

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[21] Braun, Technology in Context, 77-78. Cf. chapter four, "Contemporary Problems in Technology."

[22] Braun, Technology in Context, 93.

[23] Braun, Technology in Context, 102.

[24] Braun, Technology in Context, 104.

investment in production technologies is not recouped. Research and development costs jump to keep up with increasing innovation, waste increases with the necessary disposal of obsolete goods, and workers and consumers become disoriented by excess novelty. Each effect is counter-productive in the struggle for corporate survival.[25]

TA presumes that negative effects of too rapid deployment of new technologies are minimized by making sure that a given new technology is *needed*. A portion of this need is in the consumer sector, but the problem here, Braun admits, is that much consumer demand is manufactured by marketing and advertising. Thus much consumer demand could be said to more directly serve the "need" of the producer than the consumer. More obviously concrete need is represented by the common good, or interests such as the underprivileged or the environment which do not have direct representation in the decision-making of the market.[26]

In summary, Braun understands TA to be a political tool based on a form of moral deliberation designed for the managers of business and the policy formers of nations. It coordinates the actions of the firm or nation so as to serve the tactical interests of that entity. Managing the technical change the entity undergoes is only part of this task, but an integral and critical part of its long-term health. Managers must also consider objective criteria of real need and social utility in order to value those public goods not protected by market forces, rather than just making a strictly profit-based calculation.[27]

Braun's presentation of the conceptual framework of TA is by no means unique, and therefore represents well the way contemporary managers conceive their attempts to think the future. The form their deliberation takes is a response to the questions put to them by TA, and thus they might be said to be "being together in what is understood."[28] The question of this thesis is whether TA is encouraging our ten men to ask the right questions.

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[25] Braun, Technology in Context, 105.

[26] Braun, Technology in Context, 105-107.

[27] Braun, Technology in Context, 5, 106-107.

[28] Martin Heidegger, Being and Time: A Translation of Sein und Zeit, trans. Joan Stambaugh (New York: State University of New York Press, 1996), 153-154.

Imagining that one of our ten men were to search for literature analyzing and critiquing these presuppositions from a Christian perspective or giving practical guidance about making such decisions in a Christian way, what might he find? If he were involved in making decisions about a narrow range of high profile, media-worthy topics such as biomedicine, ecology, animal welfare, information technology or weapons, he would find a wealth of studies suggesting the desirability of one or another course of action, in some cases utilizing theological reasoning and others recounting technical details and indicating "ethical issues" that might arise.[29] He might also turn to the literature on Christian business ethics, but would find that it is focused on questions of truth telling and deception, employee/employer relations, environmental impacts and property ownership policies.[30] While these particular discussions of individual questions would undoubtedly help to frame a limited range of TA inquiries, they vary widely in their theological method and do not directly question the ethical system which TA assumes, nor would they provide a framework for dealing with questions outside the narrow scope of their particular questions.

In searching for more general treatments he might find approaches which agree that technology must progress and which argue, on more or less Christian grounds, that only theology can posit the values toward which it is directed. This position will be

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[29] Compare as an example of these two forms of study Oliver O'Donovan, Begotten or Made? (Oxford: Oxford University Press, 1984) with Thomas A. Shannon, Made in Whose Image: Genetic Engineering and Christian Ethics (Amherst, New York: Humanity Books, 1999).

[30] Alexander Hill, Just Business: Christian Ethics for the Marketplace (Carlisle, UK: Paternoster Press, 1998). Richard Chewning et al., Business Through the Eyes of Faith (Leicester: Apollos, 1992); These Christian treatments vary little in material focus from secular treatments such as Elaine Sternberg, Just Business: Business Ethics in Action, 2nd ed. (Oxford: Oxford University Press, 2000).

referred to in the next chapter as the humanist understanding of technology.[31] Of studies which directly address procedures for making decisions about any new technology, he would find a wealth of sympathetic and sophisticated practical and theoretical philosophical discussion.[32] He might also discover the less sophisticated analysis and theology of Ian Barbour's thinly Christianized TA.[33] While these two projects aim to validate the status quo, Responsible Technology emerges from the Dutch Calvinist tradition and makes an eloquent protest against the narrowness of the decision-making frameworks of TA by attempting to develop a set of wider considerations which should influence good, Christian design.[34] This project most resembles Responsible Technology, despite my attempt to make explicit theological reasoning play a more prominent role than is apparent in this Herman Dooyeweerd-influenced account.

***The Plan of the Project***

This chapter looked briefly at two examples of moral deliberation about the practice of manufacture, an ancient silversmith and a modern boardroom, to expose the presuppositions guiding modern deliberation about the implementation of new technologies. In Part II of this study we will look in depth at another set of practices, the worship of the Christian church, and try to link those practices with the form of moral deliberation it calls forth. The contrast which the study will establish and examine is the comparison of the logics of the boardroom and the worship service, and the extent to

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[31] For a Christian version see C. A. Coulson, Science, Technology and the Christian (London: Epworth Press, 1960). For a pragmatist/Rawlsian liberal version see Paul A. Alcorn, Practical Ethics for a Technological World (Upper Saddle River, New Jersey: Prentice Hall, 2001). These will be referred to as humanist because they assume that technology is simply a tool needing well-defined objectives for their use which humans must conscientiously supply.

[32] See Shrader-Frechette, Science Policy.

[33] See Ian G. Barbour, Ethics in an Age of Technology (The Gifford Lectures 1989-1991, Vol. 2) (London: SCM Press Ltd., 1992), especially chapters eight and nine.

[34] Stephen V. Monsma et al., Responsible Technology: A Christian Perspective (Grand Rapids, Michigan: William B. Eerdmans, 1986).

which they are mutually reinforcing or call one another into question. I will argue that in talking about these narrower social spheres (the activities of boardroom and worship service) we are in fact discussing the logic of our action as a whole. My contention is that our *whole* form of life can be made explicit in relation to technology by asking how it meshes or clashes with the logic of these two settings.

It is important to emphasize the presupposition of this study that the service of worship and the practices of the boardroom meeting are both contexts in which our form of life as human beings rises before us as explicit questions: Who are we and where are we going? How will we dwell on this earth? These questions encompass both theory and practice. Decisions about technology are not only "theory" but also practice, as the Christian life is not simply assent to dogmas. By pointing to the practices of the boardroom and the worship service I emphasize that decisions about how we will live cannot only make reference to theory. In worship we make explicit in a moment of our living the meaning and context of theology as part of life which takes refuge under God's wings.[35] We are questioned and our action gives answers, or, we might also say, here we see the ways our lives enflesh a vision of humanity.

One type of answer to this questioning is examined in Part I, the outlines of which have begun to emerge in our examination of the logic of the corporate boardroom. Here humanity questions its surroundings to discern possibilities for action, conceiving its context to be a chaotic one upon which it acts in order to bring about a secure future. Here moral being and moral deliberation assume a specific and describable shape in which technology plays a central role and from which issue technological artifacts coherent with its logic.

The primary task of Part I will be to trace Martin Heidegger's response to such thought along with two of his many interpreters, George Grant and Michel Foucault. All share the common desire to elucidate how human beings ought to live in the world, and the presupposition that good living in the world is superior to the denuding, exploitative, corrupting way of dwelling. They establish that the dilemmas of TA are false dilemmas which cause us to lose sight of wider and more destructive rifts in the contemporary way

of life by bringing clarity to the claim that we do not simply *make* technology: it is the Western way of *living* in the world.

Part I establishes that technology has this much wider range of implications than contemporary moral deliberation about new technologies typically recognizes. Thus any moral theory which hopes to adequately analyze new technology must also address these wider frames of reference. Part II sets out how worship is a practice in this "thick" sense, making it a rival to the technological way of being in every sphere of human action. The task of Part II is to describe this second form of human action which begins with the transformation of humanity represented by and sustained in the gathering and worshipping of the Christian community. This community gathers together because it believes it has been gathered, and in this gathering it perceives *itself* as questioned and reformed as it seeks to actively participate in this reformation. Here God's transformation of humanity is celebrated, and a renewal of life issues in a growing appreciation of a new way of relating to other people and to creation. This reconciled and reconciling logic of life shapes the worshipping community's understandings and practical relations to technological artifacts, inevitably conflicting with the way of being laid out in Part I.

The argument of Part II begins by defending the assertion that Christian moral theology cannot serve any ethical methodology, but can only point to its authority, the person of Jesus Christ. This means that the critical analysis of Part I will be understood as an anticipatory exploration whose insights are taken up in dialogue by the theological discussion of Part II. There is no strict correlation of content between Parts I and II.

Part II begins from the practice of worship explicated by Bernd Wannenwetsch. This practice is the central practice of human redemption, the impact of which on human political relations is outlined in chapter four. In chapter five worship is re-examined through the work of Karl Barth as the practice of Sabbath, and the ethical implications for our relations with ontological order are set out. Chapters four and five develop a material description of the ethical contours of redeemed life, illustrated by outlining the ways the two approaches differ in their response to particular social practices. Finally, Augustine

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[35] Psalm 91:4.

and Barth are paired to set up a genealogy of technology, re-narrating technology as good and evil for the purpose of situating contemporary deliberation about new technology.

It is also important to note that the subject of this study is human action: the development of a diagnosis of its present shape and the construction of the basic outlines of a normative, Christian description of what it is called to be. Such an attempt is based on the claim of faith that only through the worship of the living Trinitarian God are we questioned in a way which leads to salvation. Here alone may we discover our true being, ceasing our wandering to be given wholeness. This means that the house of God is the true home of humanity, because here alone are we definitely taught what it means to live within the other moments of God's action. Here we may understand that God has revealed His being first in His dealings with Israel and then in Christ, precisely in order that we may rightly live within the cosmos of His creation.

To grasp that right living in the house of creation is known most definitively in the house of worship is the work of divine grace. The content of this work is both the shattering blow of the cross and the renewal of life which is resurrection and Sabbath. In this Word to humanity we may learn that technology cannot displace reliance on God's grace, meaning it must not become *itself* a false home. In the house of worship God tells humanity that it does not need to frantically create a home because it has already been housed by a gracious Creator. The fear of *having* to create meaning and shelter is already to wander the path of darkness.

# PART I: NEGATIVE THEOLOGY

# Chapter One: Martin Heidegger on Technology as a Way of Life

Human territory is defined least of all by physical frontiers.

John Fowles[36]

The technology assessor's analysis of technology is typical in understanding the problem of technology (insofar as problems arise) to be the problem of optimal control. Such a position might be called an instrumentalist view. This view is characterized by the resolution to make technology more faithfully serve the ends it has been designated to serve by reconfiguring its properties in order to curb the problem of "autonomous" or uncontrolled technologies. This might include such attempts as prioritizing the use of hand tools over power tools,[37] or engineering for the prevention of accidents rather than the traditional focus on mechanical efficiency.[38]

A contrasting position regards the problem of technology to be the clarification of the proper ends it should serve, protesting that the tools of technology have not been directed by humans toward good ends. We might label this position humanist, which resolves to put the human will in order by positing good ends, vowing, for instance, to focus technological development on service to the marginalized,[39] or by stressing that its

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[36] John Fowles, The Magus, quoted in Gregory J. E. Rawlins, Slaves of the Machine: The Quickening of Computer Technology (Cambridge, Mass.: The MIT Press, 1997), 63.

[37] Ivan Illich, Tools For Conviviality (New York: Harper & Row, 1973). Cf. also Langdon Winner, Autonomous Technology: Technics-out-of-Control as a Theme in Political Thought (Cambridge, Mass.: The MIT Press, 1977).

[38] See Robert Pool, Beyond Engineering: How Society Shapes Technology (New York: Oxford University Press, 1997), chapter nine.

[39] Karl Jaspers, Man in the Modern Age, trans. [from German] Eden and Cedar Paul (London: Routledge & Kegan Paul Ltd., 1966).

windfall be equitably distributed,[40] more ecologically sensitive,[41] or more highly valuing of individual difference and therefore less coercive.[42]

For Heidegger, both solutions are not only dead ends but also make the technological predicament deeper because they leave untouched an essential examination of more basic assumptions out of which our technological predicament has grown. The purpose of this chapter will be not to develop a full exposition or critical analysis of Heidegger's work, but to allow his thought on the topic of technology to shed light on the modern way of being. In the context of this study, he anchors the redescription of the practices of our ten men which is the purpose of Part I. I trace Heidegger's nuanced definition of technology which exposes the way our usual thought about technology is reductive and therefore short-sighted. Heidegger argues that technology is not "things we make" but is "the way we live", and if ignorant of this our technological rationality will come increasingly to characterize our relations with all things culminating in understanding humanity itself as a raw material.

In arguing this case Heidegger traces several moments in the rise of the technological way of being embodied in the instrumentalist and humanist positions. He shows that the groundwork for the modern way of being was laid in ancient history, but that the flowering of these early cultural innovations went through successive stages to produce the highly technologized practices of our age. His criticism of the instrumentalist and humanist positions also entails a critique of the thought structure of Enlightenment rationality which both take for granted. Having traced this background development of Heidegger's explicit thinking about technology, I explore how Heidegger's late view of technology avoids what he claims are the oversimplifications of the instrumentalist and

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[40] Cf. Karl Marx, Capital: A Critique of Political Economy, vol. 1, trans. Ben Fowkes, intro. Ernest Mandel (London: Penguin Books, 1976).

[41] Hans Jonas, The Imperative of Responsibility: In Search of an Ethics for the Technological Age, trans. Hans Jonas with David Herr (Chicago: The University of Chicago Press, 1984).

[42] Herbert Marcuse, One Dimensional Man: Studies in the Ideology of Advanced Industrial Society, intro. Douglas Kellner (London: Routledge, 1964).

humanist solutions, while maintaining that his solution has both internal problems and theological mistakes which our remaining chapters will attempt to rectify.

I take from Heidegger's analysis a critique of the usual modes of talking about how technology should be "guided". I further indicate that his "metaphysic", which sees thought, action, and making as an indissoluble unity in order to grasp technological activity in a "thick" way, might prove, on further thought, to be indispensable to a properly theological account.

### *The Encompassing Reality of World: Beyond Idealism and Empiricism*

Heidegger's philosophy, upon which his criticism of the instrumentalist and humanist solutions to the problem of technology are built, grows out of a critique of German Idealism. Heidegger censures Descartes, whose "I think therefore I am" represents for him the pure idealist position in which true knowledge is graspable by the solitary subject without reference to phenomenological investigation. This neo-Platonism claims that we can only know things we encounter because they conform to a concept which deductive logic has provided for the rational agent.[43]

But, Heidegger counters, in order to apply any ideal description of a thing to an object in lived existence we must first assume that we *do* receive some information about the substance of that thing which enables us to connect it to the ideal logical schema from which Descartes claims to know the world. The fact that Descartes cannot but rely on the receipt of phenomenological data provided by things themselves which is not contained in logical ideas reveals the insufficiency of idealism as an explanation of cognition.[44]

Heidegger's counter-proposal is that true cognition is built up in the moments when the properties of things themselves *disrupt* our regular patterns of cognition. Instead of understanding the disclosure of things to be a purely top-down project of inference, Heidegger holds that not only must we have ideas to guide our exploration of the world,

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[43] Heidegger, Being and Time, 8-9.

[44] Heidegger, Being and Time, 92.

but that these ideas are formed and reformed by the process of things in themselves emerging and revealing themselves not to be in conformity with our thought schemas. It is the unforeseen emergence of that which is hidden in our normal ways of looking at things which is the possibility of knowing things in themselves, and the memory of such disturbances establishes our cognitive frameworks.[45] So all things, we can assume, must have both a part of their being which we recognize because they conform to our expectations of how things are, and an unrecognizable part, which is invisible as a part of being which is outside of the categories whereby we might know it.

Because it disavows this unrecognized aspect of the ontological, pure idealism must be repudiated, and this means that we must revise Descartes' *cogito ergo sum.* Heidegger begins his philosophy not with the thinking being, but with the sheltering, eating, communicating being embedded in activity and learning. Rather than begin our search for truth in the rarefied air of solitary contemplation, we must begin by understanding that for things to appear to us at all, they must have been discovered as things which are relevant to our own lived existence. Things become relevant to us through a web of interconnected human communication and our individual need for food and shelter. The totality of the web of thoughts, communications and habitual behaviors within which we receive the frameworks of thought through which we explore things, Heidegger calls *world.*[46]

The term 'world' makes explicit the myriad of ways our practical behavior and our theoretical behavior are inextricably intertwined. Many if not most of our daily practices proceed without any reference to theory. Yet we are able to abstractly theorize about objects and our practices, and thus arises the possibility of explicit knowledge. Heidegger insists, however, that the basic level of our encounter with all things is within the categories of usability and from this the possibility of theoretical thought arises. We

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[45] Heidegger, Being and Time, 70. This might also be understood as a *reformulation* of idealism. Cf. Hegel's Phenomenology of Spirit, paragraph 109.

[46] Heidegger, Being and Time, 78-81.

discover the forest because it is timber, the wind because it is in our sails, but these things only appear to us at all because we have learned to use them in these ways.[47]

According to Heidegger, the signings of language are the conduit for the exchange of this knowledge of things and their usefulness. We gesture in our communication to regions of being which may be useful to others or, more basically, we discover the world because others have gestured to us and we have come to understand regions of being as useful to us. Communication is not really comprehended until it draws us into its world, orienting us to our environment, helping us to understand what is useful for our sustenance. Human communication brings us to share in the totality of useful things so that the being which is nearest us becomes visible to us in its beneficiality to us. Signs explicitly indicate the relevance of the things we encounter, and implicitly inculcate the habits and practices of our contemporaries in which we participate, so mediating world to us.[48]

If world is the semiotic and praxological context in which we learn to relate ourselves to things and people, Heidegger continues, then *care* is the self-interested concern which draws us into relations with things and people. We are always with others, and the other can only be encountered as part of world. The other is not first encountered because I already have a prior self-understanding from which I posit other beings in differentiation from myself. Only gradually does the child become aware that it is an *I*, and that the other is a *you* because the I and the you care for different sets of things. Even farther from us is the *he*, who is "over there" and thus even less related to the set of things that I care about. In this way Heidegger constructs an understanding of existential spatiality. The *I* is the being whose concerns are closest to me, the *you* with his or her concerns are understandable to me, and within the range of my ongoing attention, and the

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[47] Heidegger, Being and Time, 65-66. This thought produces problems for his understanding of technology, to which we will return.

[48] Heidegger, Being and Time, 74. As one commentator notes, cultural practices are an "...implicit pedagogy, capable of instilling a whole cosmology, an ethic, a metaphysic, a political philosophy, through injunctions as insignificant as 'stand up straight' or 'don't hold your knife in your left hand.'" Paul

*they* stand at the periphery of my attention; their cares and my cares are distinct, and their being occupies my attention only rarely. Yet whether recognized or not, this existential spatiality allows me to recognize that the *they* is present with me in the artifacts that their hands have produced which I live in, put on, and eat. In turn my action affects their life because it alters the world they and I share. I am always present to the other via my action and words as the other is present with me, yet it is essential to our taking this interaction seriously that we bring to explicit awareness the many levels of this interaction.[49]

Heidegger agrees with Descartes that philosophy cannot avoid beginning with an I, and this I is the being toward whom I gesture when I mean myself. Yet, unlike the Cartesian self-reference, this gesture does not yet define others but simply notes the place from which all examination within world must begin, the durative locus for this exploration. This self is always concerned with its own possibilities, and thus is wrapped up in its own cares. In this sense, "care of the self" is a tautological phrase.[50] We both care to be engaged in knowing things because we care for the self, and yet all that we know about this care is given to us by others.

## Death and the Possibility of Transcendent Thought

Having leveled such a critique of Descartes, has Heidegger locked himself in a tautologous cycle of endless immanence without the possibility of transformative transcendence? Heidegger is well aware of Descartes' quest for a transcendent foundation for truth, but insists that by making transcendent ideals the beginning and end of truth the real world is disallowed a role in human cognition. How then does Heidegger escape from the implication that we can *never* think anything other than what other people think?

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Matthews, The Revelation of Nature (Aldershot, England: Ashgate Publishing Ltd., 2001), 110, quoting Pierre Bourdieu.

[49] Heidegger, Being and Time, 112-13.

[50] Heidegger, Being and Time, 293. This phrase comes to anchor the phase of Foucault's work examining *how* we shape ourselves which is examined in chapter three.

He does so by examining the phenomenon of death, the inherent temporal aspect of the limit of the self.

Because knowledge arises in the context of world, Heidegger believes that the basic human problem is proper individuation. Philosophy can reveal when an over-identification with the other leads to acting and seeing in ways prescribed by the masses. This unwarranted solidarity with contemporary thought and practice means that public opinion is granted a solidity which refuses any investigation of the reality of being itself. Thus world is allowed to establish our identity and choose for us the possibilities of our own being. In each present moment our understanding of truth is grounded not in things as they are but in the public view of things because we are closed to the truth of things themselves.[51]

Heidegger refers to this being defined by the masses as averageness or inauthenticity—for it systematically repudiates the being's ability to care for its own interests as an individual rather than being told what to care for in ways which may ultimately obscure the truth. The only way to break out of the sway of averageness is to transcend our enmeshment in the other to establish a self. This may be accomplished by coming to understand our true *otherness* from world by contemplating the death which is irrevocably unique, ours. By grasping the individuating import of our own death we are enabled to perceive world anew, and the possibility arises that we may allow other beings to exist for their own potential being, rather than simply for our own ends.[52] Michael Gelven situates this attempt to ground transcendence in finitude within the tradition of idealism, which Heidegger modifies by following Nietzsche's radically immanent grounding of epistemology.[53]

Dying alone, Heidegger says, helps us to see that we exist in our own particular place, not the generic nowhere which the public view pushes upon us. Yet we have been enabled to transcend this particular place not by taking an eternal viewpoint, but by

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[51] Heidegger, Being and Time, 119, 182.

[52] Heidegger, Being and Time, 274.

[53] Michael Gelven, A Commentary on Heidegger's Being and Time (New York: Harper & Row, 1970), 203-204.

allowing our finitude, with its past, present, and future to really affect us, urging on us a different view of the possibilities of the present. Having come to know that we must be born in a single setting (past) and proceed to an utterly unique end (death) we are able, Heidegger contends, to resolutely insist on our individuality against the public view which is always enmeshed in the present. This enmeshment in the present is characterized by fear and anxiousness as the inauthentic feel themselves being carried into an unknown future, or a pallid lack of emotion as the individual gives him or herself over to world without any resistance. While seeing our individual death clearly may lead to angst about being so deeply shaped by the many, tempting us to simply relax into its oblivion, this angst may also be put to good use in leading us to the hope that we may successfully achieve a state of self-possession of our being.[54]

Heidegger later critiques this focus on the individual as too strong, arguing that the individual's freedom to imagine other possibilities for existence must be limited by tradition and the material world. In chapter four I will maintain that theologically we must say that we are saved through a movement toward *proper communion* rather than out of an improper communion into individuation. Yet Heidegger correctly emphasizes the importance of finitude, context, and communal speech for human knowledge, indicating also the importance of eschatological vision as transformative, a framework which will have important implications for his (and my) understanding of technology. But before we examine Heidegger's response to the problem of technology, we must examine what he thinks technology *is*.

### *The Birth and Ascent of the Modern Technological Way of Being*

Technology is not an object or set of objects, nor a way of handling objects with tools, but a way of being with all things, Heidegger contends. This way of being, he says, has roots in humble practices like the measurement of time. From the beginning of human history human events were regulated according to the movements of the greater and lesser

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[54] Heidegger, Being and Time, 311-312, 317.

lights of the heavens. Time was public in this way, forming the substrate of any given individual's perception of all things.[55]

This public time could be referenced by simple measurements such as the place of the sun in the sky or the length of shadows. Yet time measured by the rhythms of the day and the heavens gave way to a measure which does not depend on these rhythms, and thus directed humans to new understandings of time understood as abstract and interchangeable units. The way moderns experience the present has come to be located within world in a new way which is as "obvious" to us as was the casual glance at the sky was for primitive humanity. For Heidegger's purposes the essential difference between the two was that while both situate our experience of the present in the time of the public realm, abstract time sets up a global and simultaneous grid over human action which devalues to the point of obliteration the time-measuring aspect of the previous coordinates.[56]

The sun dial was a manufactured artifact which assumed the time-measuring technique of glancing at the sky by making this glance more accurate. But mechanical clocks severed time measurement from any direct reference to the diurnal cycle because they assumed a public view of time as a standardized unit. With the clock time is made public in such a way that the profile of time as a sequence of identical "nows" is given precedence over time as a unique part of a unique day of the year. The point of this observation is not that the latter is an illegitimate way of measuring time, but that each means of measuring time shifts the experience of world and thus perception of all reality.[57]

The effect on perception of this abstraction of time lies behind formal discussions of epistemology because they shape our practical activity. For the first time, time can be

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[55] Heidegger, Being and Time, 380-381.

[56] Heidegger, Being and Time, 381-382.

[57] Heidegger, Being and Time, 382-385. This makes eastern (Chinese) and western (monastic) attempts to make clocks which measure the days according to the seasonally variable hours of daylight and darkness particularly interesting in that they modified the machines of time keeping rather than foregoing the connection with the "natural" arbiters of time.

"objectively understood" as a sequence of nows passing away and arriving in a continuous flow, creating the popular understanding of time as a "flux" of nows, or as a "course of time." Heidegger has been striving to displace this undifferentiated measure of time by arguing that if time is existentially conceived as the succession of our caring for things in which one thing must follow another, then at a basic level each thing has unique temporal significance. The abstraction of clock time is fruitful for certain ways of thinking even as it strips lived time of both datability and significance. But this common modern understanding of time, which takes abstract time to be "real" and the existential reality of human communion to be less real, cannot make sense of the relation of time to world and human significance. These relationships have been covered over by the abstract conception of time. Being covered over, the real significance of time as the sequence of human beings caring for things is obscured in favor of an understanding of time as that arena in which humans enter life and grasp possibilities before their expiration. So clocks are both emblematic of and necessary to modern technology, which, Lorenzo Simpson comments, both depends on and is spurred by the clock. Thus, "...we can begin to see how the clock as a representation of time as linear, as irreversible, as the bearer of the irretrievable, is a key to the technological phenomenon."[58] The clock is the machine which embodies and sustains the abstract form of public time which obscures the temporal significance of our being-together.[59]

Heidegger uses this example of the clock to point to something profound happening in human thought. His basic observation is that "modern science is *mathematical*. From Kant comes the oft-quoted but still little understood sentence, 'However, I maintain that in any particular doctrine of nature only so much *genuine* science can be found as there is mathematics to be found in it.'"[60] Mathematics proper (geometry, etc.) relies on a deeper experience of reality, an experience which can be

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[58] Lorenzo C. Simpson, Technology, Time and the Conversations of Modernity (New York: Routledge, 1995), 23.

[59] Heidegger, Being and Time, 386-387.

[60] Heidegger, "Modern Science, Metaphysics, and Mathematics," in Basic Writings: From Being and Time (1927) to the Task of Thinking (1964), ed. and trans. David F. Krell (London: Routledge, 1993), 273.

learned, a *way* of experiencing, which can be expressed in mathematics proper. So 'mathematics' can have two meanings: what we learn through this manner of inquiry and the manner in which we learn it. The Greeks grasped the essence of this learning, and the construction of the mechanical clock marked the point in human history when this esoteric learning became public for the first time, so hastening its application to regions of human experience hitherto regulated and marked by other measures.[61]

Having traced the earliest stages of the rise of the mathematical, Heidegger contends that the most systematic and creative culmination of the mathematical metaphysic was Isaac Newton's Philosophiae Naturalis Principia Mathematica of 1686-87. This text inaugurated the age of modern science, as Newton brings to explicit statement a philosophical presupposition which had been hovering in the tradition, most obviously in the work of Galileo. This first principle, the principle of inertia, states, "Every body continues in its state of rest, or uniform motion in a straight line, unless it is compelled to change that state by force impressed upon it." Now accepted as self-evident truth, this law was until Galileo's time not only unknown, but, Heidegger contends, most regions of nature and being were experienced in such a way that the axiom would have appeared senseless.[62]

In the west to this point, Platonic and Aristotelian philosophy had been ascendant, in which a moving body was considered to be seeking its rightful place amidst a layered universe in which the earth stood at the center, water upon it, air around the whole, and fire in the heavens. Thus all things could be observed to move regularly toward their natural resting point, either in straight or, in the case of stars, circular lines. Circular movement was considered the perfect movement because it exhibited a change which returns to its beginning and is its own place, while linear movement was a deviation from

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[61] Heidegger, "Modern Science," 273-278. Heidegger's understanding of the roots of technology does, in fact, square with the historical evidence. Cf. Marshall Clagett, Greek Science in Antiquity (London: Abelard-Schuman Ltd., 1957), 3-31.

[62] Heidegger, "Modern Science," 279-280.

this perfect movement. In addition, bodies which moved in straight lines were ontologically inferior to bodies that moved in circles.[63]

But, Heidegger argues, Newton reversed this whole cosmology.[64] Within this radical shift in metaphysical perspective are eight novel assertions. First, all being is asserted to be homogenous, discarding the division of the universe into earthly and celestial bodies. Second, the priority of circular heavenly motion over linear motion disappears, and though straight lines become decisive Newton refuses to divide bodies on the basis of their kinds of motion. Third, the notion of "proper place" disappears. Place is no longer where a thing belongs, but a position related to other positions. For the first time we may investigate why things do not travel in a straight line, making circular motion the anomaly to be explained. Fourth, motion is no longer a characteristic of the composition of a substance but is determined by an extrinsic variable related to the law of linear motion. Thus force goes from being understood as originating from within a thing to an energy which impacts a thing from outside, causing linear progress to deviate. Fifth, motion is no longer investigated as a displacement from position but becomes generic and measurable, a change paralleled by the transformation of nomenclature from the term weight to mass. Sixth, this change means that the difference between natural and violent motion against nature are eliminated, making all motion measurable in generic units.[65] The seventh and eighth novelties are critical.

7. Therefore, the concept of nature in general changes. Nature is no longer the *inner* principle out of which the motion of the body follows; rather, nature is the mode of the variety of the changing relative positions of bodies, the manner in which they are present in space and time, which themselves are domains of possible positional orders and determinations of order and have no special traits anywhere.

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[63] Heidegger, "Modern Science," 284-286.

[64] For what follows, see "Modern Science," 274-294.

[65] Heidegger, "Modern Science," 286-287.

8. Thereby the manner of questioning nature also changes and, in a certain respect, becomes the reverse.[66]

The popular belief that modern science is based on solidly testable experience is here exposed to be covering a highly interpretative activity. Having disavowed the more poetic science of medieval Scholasticism, with its roots firmly in the integrated moral and natural knowledge of Greek philosophy, modern science has at its center a law describing the motion of a body which does not exist.[67] "It demands a fundamental representation of things that contradict the ordinary," notes Oliva Blanchette, who continues, "Ancient metaphysics started from being in its concrete actuality, not from an abstract name for some objectified real essence. It considered being as a subject of consideration in experience, not as a formal object separated from experience or what Kant would later refer to as an unknowable noumenal object."[68] Because it was so extraordinary, this newly explicit metaphysic required long controversy to bring it to power. Galileo dropped differently weighted balls in Pisa and attempted to explain the difference in their fall (even though the experimental evidence contradicted his theory) not by making reference to the nature of the falling objects but by reference to the resistance of the medium through which they fell. This theory was the antecedent to Newton's, Heidegger points out, and already contains the idealistic heart of modern science. "In his *Discorsi*, which appeared in 1638, Galileo said: 'I think of a body thrown in a horizontal plane and every obstacle excluded…the motion of the body over this plane would be uniform and perpetual if the place were extended infinitely."[69] The most important move in this formulation is the "to think in the mind" in which all bodies are alike, no motion is

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[66] Heidegger, "Modern Science," 288. Point seven is particularly laden with implications when we understand that the Aristotelian definition of motion also grounds Aristotle's *moral* philosophy on which the Christian tradition based its most influential account of virtue ethics. Cf. Aquinas *Summa Theologiae*, Part I, Q5 A8.

[67] Heidegger, "Modern Science," 289.

[68] Oliva Blanchette, "Suarez and the Essentialism of Heidegger," in The Review of Metaphysics 53 (September 1999): 1:209, 11.

[69] Heidegger, "Modern Science," 290.

special, and thus all change in motion is a deviation from a basic blueprint of the motion of a point of mass.

Now Heidegger can outline the essence of the mathematical, the way of being in the world from which modern technology springs:

1) It is a mental projection which skips over certain perceptions in order to open another domain from the obvious one in which things generally show themselves.
2) This projection posits beforehand what things are to be understood as, and how they are to be evaluated, setting up axiomatic propositions about the way things are.
3) These axioms anticipate in advance the structure of everything and its relation to every other thing.
4) The nature of a thing is laid out for the future to encompass all knowable objects. Bodies are now things existing in the context of uniform space-time context of motion.
5) Now nature so described requires a mode of access appropriate to these axiomatically predetermined objects. Preconditions are proposed by which things are said to show themselves and the inquiry is predetermined by the outline of this project. This determines the shape of the modern experiment. "Upon the basis of the mathematical, the *experientia* becomes the modern experiment. Modern science is experimental because of the mathematical project."[70]
6) Because this project establishes the uniformity of all beings, it requires a universal and uniform measure.

The new form of modern science did not arise because mathematics became an essential determinant. Rather, that mathematics, and a particular kind of mathematics, could come into play and had to come into play is a *consequence* of the mathematical project. The founding of analytical geometry by Descartes, the founding of the infinitesimal calculus by Newton, the simultaneous founding of the differential calculus by Leibniz—all these novelties, this

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[70] Heidegger, "Modern Science," 292.

mathematical in a narrower sense, first became possible and above all necessary on the grounds of the basically mathematical character of thinking.[71]

This new view of the world, with its reversed mode of perception, is not yet a description of science, but is an outline of a fundamental change in the way that questions were posed, laws established, and new regions of beings disclosed, Heidegger concludes. Because it is such a way of perceiving all things, it now becomes possible for the first time to act out the absurdity of applying the mathematical to solve the problems caused by seeing all things mathematically.

## The Rise of Mathematical Thinking as a World View

According to Heidegger this absurdity becomes possible with the total dominance of the mathematical which results from the collapse of other orienting schemas. Prior to the early modern emergence of the mathematical, authoritative truth was grounded in the church and faith and was conceived as a relation between symbols and values, with natural knowledge having no independent intelligibility or grounds outside of this framework. In one historian's words,

The highest object in the city was the church spire which pointed toward heaven and dominated all the lesser buildings, as the church dominated their hopes and fears. Space was divided arbitrarily to represent the seven virtues or the twelve apostles or the ten commandments or the trinity. Without constant symbolic reference to the fables and myths of Christianity the rationale of medieval space would collapse.[72]

But mathematics provided the negative condition for the severing of thinking from this symbolic world. In the mathematical project truth is grounded by reference to internally coherent principles. It is no coincidence that a generation after Galileo Descartes

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[71] Heidegger, "Modern Science," 293.

[72] Lewis Mumford, Technics and Civilisation (London: George Routledge & Sons, Ltd., 1947), 18.

developed a philosophy which, by contemplating the essence of the mathematical, came to understand the self-grounding axioms of mathematics to be the warrant for *all* true knowledge.[73] Heidegger notes that Descartes' "simultaneous advance in the direction of a foundation of mathematics and of a reflection on metaphysics above all characterizes his fundamental philosophical position."[74]

In *Regulae ad directionem ingenii* Descartes explicitly enunciates the basic mathematical/metaphysical character of all modern knowing. Here we do not intuit or directly perceive knowledge, but extract it by deploying a rational method. Method is not one component, but *the* primary component which establishes what beings may emerge. And method, Descartes tells us, must begin not with stories or images but with the simplest propositions, making the axiom the basic foundation upon which everything else is based in insightful order. Because mathematical knowledge has been set up as the principle of all knowledge, all knowledge is now questioned, whether previously tenable or not.

> Descartes does not doubt because he is a skeptic; rather, he must become a doubter because he posits the mathematical as the absolute ground and seeks for all knowledge on a foundation that will be in accord with it. It is a question not only of finding a fundamental law for the realm of nature, but finding the very first and highest basic principle for the Being of beings in general. This absolutely mathematical principle cannot have anything in front of it and cannot allow what might be given to it beforehand.[75]

With this formulation Descartes solidifies the inversion of the knower and the known.

> Until Descartes, every thing at hand for itself was a "subject"; but now the "I" becomes the special subject, that with regard to which all the remaining things first determine themselves as

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[73] Heidegger, "Modern Science," 295-297. Thus Descartes re-integrated moral and natural knowledge to create a unified philosophy of all things to complete the replacement of the Greek view.

[74] Heidegger, "Modern Science," 299.

[75] Heidegger, "Modern Science," 301-302.

such. Because—mathematically—they first receive their thingness only through the founding relation to the highest principle and its "subject" (I), they are essentially such as stand as something else in relation to the "subject," which lie over against it as *objectum*. The things themselves become "objects."[76]

Heidegger levels the obvious accusation: this is a new and radical non-openness to beings. What is posited and spoken cannot speak against what posits and speaks it. Michael Inwood summarizes this non-openness:

The modern experiment essentially involves 'exact' measurement. Objects are shorn of their essences and regarded as mere individuals conforming to mathematical regularities. These regularities determine in advance what counts as objective. Scientists do not conduct exact experiments to discover whether nature conforms to mathematical regularities; they do so because they presuppose a projection of nature as mathematical. Experimental in this sense is quite different from 'experience': 'science becomes rational-mathematical, i.e. in the highest sense *not* experimental'. 'Experiment' and 'experience' were once contrasted with the medieval practice of examining authorities and previous opinions. Now they are contrasted with mere observation and description, guided by no mathematical anticipation.[77]

Heidegger's hope is that the hegemony of this "mathematical anticipation" of all things may be reversed so that a true openness to other humans and material otherness can be recovered. But if modern science has been such a boon to humanity, bringing new health and prosperity the globe over, then what objections can he have to the reversal in human self-perception which grounds it? Part of the task of substantiating Heidegger's claims will be to indicate the encroachment of the mathematical way of being into realms where it impoverishes our relations with one another and creation. The following two chapters will examine examples of the totalizing tendency of the mathematical in its

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[76] Heidegger, "Modern Science," 303.

[77] Michael Inwood, "Experience," from A Heidegger Dictionary (Oxford: Blackwell Publishers Ltd., 1999), 63-64.

connection with the dilemmas of technological life. We return now, however, to consider Heidegger's solution to such dilemmas of the mathematical way of being.

### *Can We "Tame" Technology? Technology as a Way of Being in the World*

This chapter began by pointing out that technology has usually been understood in one of two ways. Instrumentalists resolve to make technology serve the ends humans have chosen for it, and humanists resolve to posit good ends.[78] But if technology is understood in the broad sense that Heidegger has outlined, then we can no more legislate against its misuse than we can "get it intelligently in hand." The problem lies in both positions' assumption that technology is simply a "tool." How then does Heidegger intend to resolve the practical questions which first led us to examine our deliberation about new technologies?

Having stressed the situatedness and communal texture of all knowledge, Heidegger returns to reformulate the *question* of technology. He uses the example of a hammer which is said to be "too light" to show the tendency of certain types of knowledge to hide the communal and ontological context of knowing. Such a statement may point to the consideration that too much force is required to drive in a nail, and thus the hammer is functionally inadequate. But it may also imply that the hammer always has the property of weight, exerting a pressure upon what lies beneath it. Speaking about the hammer in this generic sense of weight, however, severs it from its context of meaning to which the "too" of "too light" refers. These two ways of interpreting our statement are thus seen as entirely different but intimately related ways of conceiving the being of the hammer. The statement that the hammer is attracted by gravity abstracts the hammer from its position in a world of useful things for human sustenance in favor of a relative measurement of position, time and mass, giving it a designation as a generic point distinguishable only mathematically from any other. Here a hammer may only be heavier than a feather and lighter than a planet. What is decisive about the mathematical view of

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[78] Heidegger, "The Question Concerning Technology," in Basic Writings, 312-313.

nature is again not primarily the mathematical element as such, but the fact that the project *discloses a priori* and in its own way.[79]

But, Heidegger protests, the understanding of the hammer as mass *cannot* become the public definition of the term weight because it both obscures the hammer as a constructed object and as an object which we comment upon because it is relevant for our life projects. While the transcendence and abstraction afforded by the concept of mass may be useful and legitimate, for this reason it cannot become our basic category for exploring our surroundings. This observation, one commentator explains, does not mean Heidegger has the intention of "lower[ing] the status of science, as some might feel, for science belongs to the general range of authentic understanding. What Heidegger does wish to lower, however, are mistaken views as to what constitutes the methodology of science (the positivists), and those who take *technique* as a mode of life."[80] The abstract framework of the mathematical is only possible because there is a way of being with things which is stable and "practical," our everyday being with things in the world of their use. Within the lived experience of practical life, things before us always take on a hierarchy of importance, and only because this primal level exists may we pursue the abstractions of science.[81]

Heidegger explains then, that such an existential concept of science tries to explain the origins of the theoretical mode of human behavior. This is distinct from the "logical" understanding of science which defines it in terms of its predictive capability. Saying that scientific behavior is a way of being-in-the-world makes it clear that science cannot be purely descriptive and theoretical, but is a set of human practices where theoretical and practical behaviors are connected in definable ways.[82]

The point of this distinction is that when we see things "as" something, this seeing already carries within it a projected world and implies a teleology. We must say then, that if the existing subject is the ground of our investigation, then the subject's world is the

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[79] Heidegger, Being and Time, 330-331.

[80] Gelven, A Commentary, 200-201.

[81] Heidegger, Being and Time, 332-334.

[82] Heidegger, Being and Time, 327.

context in which meaning arises, making it "more objective" than any possible "object."[83] But, if Heidegger has said that lived existence is the basic locus of all knowledge, how can he then say that human world is "more objective" than any possible "object", and furthermore, how can he avoid saying that technology is simply the projection of human self-interest?

Hubert Dreyfus argues that Heidegger came to realize that this way of defining knowledge left him unable to comprehend any limits to the remaking of all things through human efforts. Having successfully interrelated existential significance, the totality of involvements, and the importance of world to arrive at a deepened possibility of encountering beings not possible to traditional idealism, Heidegger seems again to have resorted to its methods in giving the individual's death "in the future" a central role and thereby rendering the particularities of time and place irrelevant. Furthermore, he soon came to see that he had given no place to an openness to nature's own self-revealing as a guide for human making.[84] These problems drove Heidegger to his mature position on technology which assumes the continuing validity and importance of his critique of Idealism, but takes even more seriously the practical implications of the complex, particular, and praxological location of all human knowing.[85]

### *Heidegger's Mature Understanding of the Question of Technology*

#### Technology Within the Law of Material Being

Crediting the problems in his early formulation to being too deeply influenced by Nietzsche, Heidegger increasingly focused his thought on the problem of modern

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[83] Heidegger, Being and Time, 335.

[84] Hubert Dreyfus, "Heidegger's History of the Being of Equipment," in Heidegger: A Critical Reader, ed. Hubert Dreyfuss and Harrison Hall (Oxford: Basil Blackwell Ltd., 1992), 173-185.

[85] On the development of Heidegger's position and his critique of Idealism see Dorothea Frede, "The Question of Being: Heidegger's Project," in Charles B. Guignon, ed., The Cambridge Companion to Heidegger (Cambridge: Cambridge University Press, 1993), chapter one.

technology as a way of rectifying the deficits of his basic insights. One of the first fruits of this focus was his realization of the importance of the material order of the cosmos claiming human making and the impossibility of doing so via appeals to either metaphysics or science if it is not to be the expression of raw human will.[86]

Heidegger's first problem with the formulation of Being and Time was its inability to sustain a reason why human making, which he had tied simply to self-interest, would not in time turn upon itself to totally remake itself. As a way of containing this tendency he saw that he had to give a greater place to the self-revealing of the material cosmos in directing the course of human making. Whereas his earlier thought seemed to center a conception of good human making upon empathetic respect for the otherness of *Dasein*, in his later work the place of otherness was expanded to include the material. This he referred to as *earth* which he came to consider the moral wellspring of all human culture.

Heidegger's most explicit outline of this new conceptual category is found in a late essay, "The Origin of the Work of Art," in which he clarified his understanding of equipment, work, and world, and the relations between them.[87] Here he makes two critical moves, first critiquing the abstraction of form from matter and then the separation of material and social aspects of reality. We begin with his first critique.

Traditionally understood, metaphysics has tended to operate utilizing a distinction between matter, or content, considered formless and alogical, and form, considered rational. This conceptual machinery has been applied within many disciplines. Such a schema assumes the possibility of such an entity as 'formless matter' or 'mere' thing-ness without any form. Heidegger points out that the impossibility of conceiving a formless object reveals that matter always has a form, and that this natural form often determines its use by humans, rather than the other way around. When we choose hard leather to make the sole of a shoe, and soft leather for its upper, we do not search for formless matter to mold into a shoe, but are forced by our project to certain materials with the sufficient qualities whose given form best serves our purposes. We have both perceived

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[86] Michael E. Zimmerman, Heidegger's Confrontation with Modernity: Technology, Politics, and Art (Indiana: Indiana University Press, 1990), 226-227.

[87] Martin Heidegger, "The Origin of the Work of Art," in Basic Writings, 143-203.

and utilized the material of the universe based on our prior desire to accomplish a certain self-interested purpose. What is a helpful abstraction of form from matter easily becomes the illusion that the given form of matter is non-existent, while our design for it is obvious and the central factor determining the way in which matter comes to have meaningful form. Under the sway of this illusion all things appear to us as either that which we can use or things whose form has not yet been conceived in use-value terms.[88]

How then are we to escape from this tendency to judge all things in usefulness categories? This is Heidegger's second critical move. Rather than utilizing a form/matter distinction, Heidegger distinguishes between the ontological material of the universe, and human social self-perception. Building on his concept of world, he adds that world stands in tension with earth, which is the source of world because in earth all things known or unknown to human world exist. Thus it is the horizon and source of human world.[89]

This new polarity, earth and world, frames Heidegger's mature thought on technology, and between the two stands human *work*. World comes into being through human work. The intelligibility structures of a historical world frame the forms of earth within a context of intelligibility, yet earth, because it has the unknown quality which is the nature of all materiality, stands against work as the fertile and mysterious ground which shelters world. Heidegger pictures this symbiotic relationship in mythic terms, earth pressing in on world attempting to reclaim it for the wild, while world strives to keep earth at bay, even as it is enriched by its mysterious multiplicity of forms. Human work does not resolve this struggle between world and earth, but *is* this struggle. The earth needs world to appear from its seclusion, and world cannot soar away from its ground—thus the wrestling of work makes both world and earth what they are.[90]

In this we see why the mature Heidegger considered the primal symbol of the human not to be the eye, nor rationality, but the hand, for humans are the shaping beings. Held in that human hand is *equipment*. Equipment is matter formed according to the design of a human task, and equipment is truly itself when grasped by man, in motion as a

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[88] Heidegger, "The Origin," 152-156.

[89] Heidegger, "The Origin," 174.

[90] Heidegger, "The Origin," 174-175.

transparent extension of his work. At the interface between the world and earth we find both work and its reliable and transparent companion, equipment.

So far Heidegger has not explained how human world can be changed except from the outside. He now goes on to explain that art is a type of work in that it physically reshapes earth, but unlike normal work it also explicitly re-shapes world. It does not simply project the new world created as in Idealism, but reveals a new world already resting within earth. The artwork links earth and world taking both into account by defining or re-defining their boundary. Art, then, is not simply an aesthetic pursuit as in common parlance, but is a self-revealing of, or a self-creating of truth by being itself, in which humans participate.

As an example of such art Heidegger examines a Greek temple. It does not portray the gods, but lets the gods be present, creating a holy space in and around itself. This holy space is structured in a way which holds in place specific socialized interpretation of birth and death, disaster and blessing, victory and disgrace, endurance and decline. As such it defines a human universe, the self-perception which is human world. In resting on the earth, the temple reminds those who participate in it that human world is sheltered in the arms of the earth, from whose bottomless multiplicity of forms culture is drawn. The temple is Being itself revealing one of its facets, through the work of human hands, at a specific point in history.[91]

As the temple performs this social function it is an artwork which is true—uniting around itself a cultural network of behavior and significations which articulate its space and give a meaning to the space in which people dwell. "The temple, in its standing there, first gives to things their look and to men their outlook on themselves. This view remains open as long as the work is a work, as long as the god has not fled from it."[92] To be a true piece of art, an object or thought must set up and keep open a world, sustaining it by creating participants in its truth, opening up a space in human perception with the aid of a thing which clarifies world and anchors its present relation to earth.

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[91] Heidegger, "The Origin," 168.

[92] Heidegger, "The Origin," 168.

This is not to say that when such a truth is set up, it is necessarily beneficial to humanity, Heidegger warns. *Ge-stell*, or enframing, is the modern version of the space cleared by the Greek temple, and is characterized by the linked procedure of knowing and making which is modern technology. This mathematical knowing/making accounts the whole earth as standing reserve, obliterating otherness as a conceptual category. This is the problem of the instrumental and humanist views of technology: they overlook a prior and fundamental western legitimization of this clearing. Humanity becomes a victim of false consciousness about its way of revealing. We believe we can get technology 'intelligently in hand' when in reality it is just this mass illusion which appears to exalt human subjectivity while offering up humanity itself as a natural resource. To posit 'good ends' or get technology 'in hand' is to augment the technological illusion, exacerbating our enmeshment in the technological way of being. Conceiving technology in this way, we see that enframing was well underway long before it was embodied in modern technology. Human work has finally become efficient at what the human mind thought in the seventeenth century, and now we believe it obvious that whatever problems the control of matter might present, more control is the obvious solution—even when it means engineering ourselves.[93]

Heidegger is not a radical foe of such enframing, because, pointing out the obvious, we can hardly escape the clearing in which we exist. But, he proposes, while standing in this clearing we may strive to take account once again of material being which stands against us with its own form rightly resisting total disassembly. Humanity's destiny is to enframe things, but not *only* to enframe. If man *simply* enframes then he loses sight of the multifaceted mystery which is earth. The danger of enframing is that it will not evolve in attentiveness to the evolution of Being, allowing humanity to be estranged from the truth which emanates from Being. Humanity must become more self-conscious about its revealing, in order to sense its enmeshment in technological revealing which is *only* enframing, a denial of Being. Heidegger's hope is that human work will become true, by which he means attentive to the prevailing self-revealing of earth.

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[93] Heidegger, "The Question Concerning Technology," in Basic Writings, 326-328.

Outside of the clearing made by the prevailing shape of world a remnant of being is and will always remain concealed, for all intelligibility rests on the concealment of 'extraneous' sense data. Yet these hidden facets of the bounteous earth are available for future art to draw out, setting up a new world which takes them into account. Truth then, is that which conforms with the prevailing balance of unconcealment and denial of earth by the current configuration of world and work. Clearly Heidegger is using a peculiar definition of the word 'truth' here in his definition of truth as the anchor of our cultural clearing. Heidegger puts it this way:

> We believe that we are at home in the immediate circle of beings. Beings are familiar, reliable, ordinary. Nevertheless, the clearing is pervaded by a constant concealment in the double form of refusal and dissembling. At bottom, the ordinary is not ordinary; it is extraordinary. The essence of truth, that is, of unconcealment, is dominated throughout by denial. Yet this denial is not a defect or a fault, as though truth were an unalloyed unconcealment that has rid itself of everything concealed. If truth could accomplish this, it would no longer be itself. *This denial, in the form of a double concealment, belongs to the essence of truth as unconcealment.* Truth, in its essence, is un-truth.[94]

This insight will resonate throughout this study: that creation is erasure, or to express one order is to submerge another. This remaking may bring about a confusion or disarray from different levels of pre-existing order, or may bring to harmonious expression a pre-existing but not dominant level of order. We will see in more detail in the next two chapters how to establish new social and material orders is to subsume or reconfigure old orders.

That which we call human work then, is a historically contextualized action which reshapes the ontological by concealing certain facets of the form of that ontological reality in order to make others more pronounced. Effectual work functions to unconceal by concealing alternatives. Human work simply maintains the current boundary between earth and world, but art is creation, a midwifery, remaking world in a new configuration

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[94] Heidegger, "The Origin," 179.

by letting "something emerge as a thing that has been brought forth."[95] What Heidegger is struggling to express with the rather inadequate image of the work of art is that the everyday questions of our work must be re-oriented. If the contemporary shape of world is characterized by unfettered human willing it can only be questioned if the orders of the material universe are taken as important in themselves, to be listened to and received as ever new and enriching.[96] Heidegger looks longingly to ancient Greece when human revealing was at its height and was such an artistic revealing, *poesis*, a revealing which brought forth that which lay hidden within earth. Having observed that such a balance between listening to and transforming being was possible in the art of Greece, Heidegger asks us to heed their example, thereby reinfusing our technological revealing with the qualities of art, allowing ourselves to be part of earth's self-revelation. Our dignity "lies in keeping watch over the unconcealment—and with it, from the first, the concealment—of all essential unfolding on this earth."[97]

In the course of the discussion it becomes clear that Nietzsche and his espousal of the naked freedom of the will to power is Heidegger's constant dialogue partner. Heidegger views modern technology as a species of Nietzschean willing, a dangerously human-centered abstraction from earth. For Heidegger good technology is human work (and equipment) which does not force its designs upon matter but is attentive to matter, thus maintaining its primal power as the living force of culture. The anthropomorphic and humanist solutions to the problem of technology (and with them most contemporary discussions of the topic) do not account for the modern denial of the form of matter, and thus they strengthen the assumption of our cultural clearing that instead of working *with* the material of the universe, work must be conceived as the project of gaining ever firmer control over matter. In such thinking, Heidegger says,

> Everywhere everything is ordered to stand by, to be immediately on hand, indeed to stand there just so that it may be on call for a further ordering…The word "standing-reserve" assumes the

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[95] Heidegger, "The Origin," 185.

[96] Heidegger, "The Origin," 194-198.

[97] Heidegger, "The Question Concerning Technology," 337.

rank of an inclusive rubric. It designates nothing less than the way in which everything presences that is wrought upon by the revealing that challenges. Whatever stands by in the sense of standing-reserve no longer stands over against us as object.[98]

Heidegger agrees with Nietzsche that human work is best defined as the "hands" of human willing, and that truth can only be defined in relation to culture. But Heidegger wants to set human willing within the context of past revealing, and curb its expansion into an "inclusive rubric" by grounding it in the self-revealing of Being itself, or earth. He will not permit Nietzsche's definition of willing as a self-posited goal to remain unchallenged. Though both agree that we cannot step outside the relative intelligibility structures of human world, Heidegger insists that revealing must be set under the law of beings. He believes that work as the preserving of a world established by art, or work as creation, the hearing of being, gives human willing a context by referring it in a controlled way to being itself. In this way Heidegger makes clear that even though we still know the world out of our basic self-interest, our work becomes destructive if we sever it from the normative claim of both ontological and cultural order. To live authentically then, the individual must resolve to stand within a culturally defined world with its peculiar and (ontologically) limited configuration of earth and world, whose boundary art defines and shows how to preserve. "In this way, standing-within is brought under law."[99]

If technology is made to serve the law of beings instead of being harnessed to a human will-centered way of conceiving the universe, Heidegger speculates that it might become what it was meant to be; part of the self-revealing of things. Only what is primal will endure, and technology, as a form of revealing, must be directed to serving that which is primal and thus enduring rather than the passing and solely human. Human dignity is found in serving as a midwife in the ongoing coming to birth of the primal. We share in revealing the truth of Being, but our freedom and dignity are not found by doing so according to mere arbitrary will nor abstract laws, but in finding a way to cooperate

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[98] Heidegger, "The Question Concerning Technology," 322.

[99] Heidegger, "The Question Concerning Technology," 192.

with Being. Heidegger's conclusion: technology as a way of work lies at the heart of the very same locus of revealing things in which lies the saving power of the primal.[100]

To summarize Heidegger's mature view, enframing is human working at an important and uniquely human task of revealing truth. Yet as conceived in the contemporary world, we are imprinted with a tendency to see the material simply as a resource, having no inherent form of its own. In succumbing to such an enframing we systematically close ourselves to the self-revealing of being which we might hear if we listened to Being itself, as we do in art. The dangers of technological enframing are: 1) The illusion prevails that everything humans encounter exists only as a human construct. 2) Yet nowhere does humanity *actually* encounter itself or the other in their essence—this difference has been elided. 3) Truth is foreclosed. It can only be reached through attention to Being and a revealing which seeks not to erase, but to allow the mysteries of Being to rejuvenate human culture. Succumbing to enframing means our own dissolution as raw material in the acid of our own technological will.[101]

***Heidegger's Strengths and Weaknesses***

The remainder of the first part of this study will be devoted to critiquing and expanding Heidegger's description of technology. The next two chapters will suggest the adequacy of his account by elaborating it from two quite different perspectives. It will become clear that Heidegger has pinpointed a major problem of the technological way of being, that it blinds us to the importance of otherness by defining all things as standing reserve. Much of the remainder of the study will be devoted to thinking through how the possibility of otherness might be re-established in order that it might again claim and orient our living, including our making of technological artifacts. We agree, then, in an as yet unspecified way, that Heidegger is correct in saying, "Man is not the lord of beings. Man is the shepherd of Being. Man loses nothing in this 'less'; rather…he gains the

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[100] Heidegger, "The Question Concerning Technology," 330.

[101] Heidegger, "The Question Concerning Technology," 332, 333.

essential poverty of the shepherd, whose dignity consists in being called by Being itself into the preservation of Being's truth…Man is the neighbor of Being."[102]

The attempt to speak in terms of neighborliness entails going behind concrete ethical questions to examine the technological ethos. Such an inquiry is "neither ethics nor ontology…. Nonetheless [the] question, though in a more original way, retains a meaning and an essential importance…can we obtain from such knowledge directives that can be readily applied to our active lives?" Heidegger answers that, "The answer is that such thinking is neither theoretical nor practical. It comes to pass before this distinction…Thus language is at once the house of Being and the home of human beings."[103] Part II will explain how such a statement might not only be taken seriously, but explicitly affirmed by Christians.

Clearly the strengths of such an account make it especially important that we provisionally set out its theological deficits. Let us recount Heidegger's salvation history. His Fall occurs when humans forget that they are part of a larger universe which is a gift sustaining their existence. Human redemption is the restoration of the integration of the human way of being with its human context and material substrate. Our theological treatment will firmly support this story as having significant parallels with the Christian story. It will, however, question Heidegger's redeeming agent, which is humanity itself, or the primal earth. In his early thought the formal concept of death functions as revelation, through which the individual learns who they are and where they are going. But Christian faith affirms the centrality of the divine Word in establishing this new orientation. Likewise, in his mature thought humanity is again alone in the house of being with creation, or with the cosmos which has no Creator, and hence he cannot lay bare the heart of the Christian understanding of being alienated from creation: that it is grounded in a more primal alienation from God. In chapter six, Augustine will argue that we can never truly be open to love and be restored to unity with creation unless we are reconciled with the God who gave it as a good gift of His love.

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[102] Heidegger, "Letter on Humanism," in Basic Writings, 245.

[103] Heidegger, "Letter on Humanism," 259-262.

Despite creation or earth functioning for Heidegger as a surrogate deity, the late Heidegger did not give earth enough solidity to support any concrete ethical claims. He ended not as an anthropological relativist like Nietzsche, but became an earth-centered relativist. Because his priority is to preserve the fluidity of culture, morality, and ontology from any solidification by a transcendent order which might lay claim to our making in a permanent way, he was simply unable to make more than the most basic ethical claim which amounts to a religious call for reverence for the earth.

This lack warrants the project of Part II to define how the material creation might be taken seriously in an ethically relevant manner. I will, however, attempt to uphold and elucidate the importance of maintaining the conceptual unity of our active life (ethics), with our practical need as beings (shelter, etc.), and our capacities as transcendent beings whose ideas are conveyed in language and whose survival depends on that language being grounded in the conditions that making speech possible: material life. We must live in the house of Being, but we do not do so by attempting to draw ethical rules directly from materiality, but by allowing it a systematic place in shaping the transcendent space in which our dreams dwell. Those dreams, Heidegger is right to say, guide our work, which is the interface between cultural world, its changes, and the way it takes up the material. This work is accompanied by material shaped to aid it, which is equipment, and is oriented by objects which anchor its current configuration, as depicted in the Greek temple.

There is then a connection between ontology and ethics, but if we set upon materiality to find moral rules for action, we uphold the very technological activism which is the source of our problem. The alternative to this activism is not passivity but openness, an attitude of waiting for "nothing" as it were—a waiting that recognizes that the cosmos is a gift. I will argue in Part II that this gift attitude is the only antidote to the traditional calculative conception of the standing reserve. Our "…releasement lies—if we may use the word lie—*beyond the distinction between activity and passivity*."[104] Ingrid Scheibler summarizes the two-fold potential of Heidegger's claim:

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[104] Heidegger, quoted in Ingrid Scheibler, "Heidegger and the Rhetoric of Submission," in Rethinking Technologies (Minneapolis: University of Minnesota Press, 1993), 131.

First, one rebuts the assumptions of positivism and the philosophy of consciousness concerning the issue of our embeddedness in a social-historical life world. Forces such as language and tradition precede us and limit our complete autonomy. That we are in this sense "dependent" can no longer be conceived as a failing. Second, Heidegger's elaboration of the relation of mutuality and dependence between human beings and nature displaces the dominant calculative-representational model that conceives of man as "lord over the earth." Heidegger calls for a recognition and awakening of the "gift" element expressed in the idea of "waiting upon"; the awareness that our field of vision is open but that its openness is not because of our looking… Wonder and curiosity are valuable precisely because they contribute to the recognition that, despite the expansion of modern science and technology into the cosmos at the levels of macro and micro, infinite and infinitesimal, there are some things that are *not* subject to calculation.[105]

Wonder and a certain respectful curiosity, identification with the creation and its limits, relinquishment of the will…George Grant expands on these fertile beginnings in the next chapter, and in chapter five I return to further clarify theologically what it means to be open to and grateful for creation.

In conclusion, we must say that Heidegger has provided a powerful but as yet untested description of the connection of the lived life to the theoretical and practical behavior of humanity, and has indicated how these behaviors might be understood to intertwine with our making. In doing so he has made it possible to grasp some of the unique facets of modern technological making. The next two chapters will break apart the two facets of human action that Heidegger has so skillfully interwoven in order to test his theories about technological life by reference to contemporary examples. This is done, however, only in agreement with Heidegger's claim that "'theory' and 'praxis' are possibilities of being for a being whose being must be defined as care."[106] Our analysis will proceed to examine the habits of technological society from the theoretical and praxological aspects in turn, on the understanding that they are only facets of the being which cares, existing within a lived activity in which the two are always united. In chapter

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[105] Scheibler, "Rhetoric of Submission," 132-133.

[106] Heidegger, Being and Time, 180.

three I trace the thought of Michel Foucault, who combines the insights of Marx and Heidegger to establish the veracity of Heidegger's insights regarding the relation between technology and the inexplicit knowledge of praxis. But first we turn to the Platonic Heideggerian George Grant, who clarifies the accuracy of Heidegger's insights regarding the relationship between technology and explicit theoretical thought.

# Chapter Two: George Grant and the Technological Hermeneutic

> Imagine a garden with a hundred kinds of trees, a thousand kinds of flowers, a hundred kinds of fruit and vegetables. Suppose, then, that the gardener of this garden knew no other distinction than between edible and inedible, nine-tenths of this garden would be useless to him. He would pull up the most enchanting flowers and hew down the noblest trees and even regard them with a loathing and envious eye.
>
> Hermann Hesse [107]

## *Grant, Heidegger, and Technology as Idea*

The aim of chapters two and three is to examine and develop aspects of Heidegger's theories about the technological way of being by situating them within analysis of contemporary social trends. George Grant and Michel Foucault each take up specific concepts from Heidegger's thinking about technology within a broader agreement with his questioning of modern deliberation about new technology. In this chapter Grant indicates how Heidegger may be understood as having correctly perceived that contemporary modes of thinking, which can be described as technological, frame the way we perceive all things. Grant suggests that contemporary thinking works within set parameters which make certain categories of being visible while rendering others invisible (for example, it can see that I am six feet tall, but not that I have moral character). He gives examples of how technology sets out to find things which fit its version of reality (conforming to mathematical reason), and in doing so devalues and destroys everything which cannot be quantified with this mode of reason. By examining Heidegger's thought from a top-down or ideal perspective Grant proves the accuracy and illuminative power of Heidegger's analytical framework in relation to contemporary

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[107] Hermann Hesse, Steppenwolf, trans. Basil Creighton, rev. Walter Sorell (London: Penguin Books, 1965), 79.

modes of thinking and therefore acting. I will contend that Grant's corroboration and extension of Heidegger's thought validates Heidegger's call for the order of material ontology to be given a substantial place in our thinking if we are to live as beings who do not see, and therefore remake, all things in a unifaceted and thus destructive manner.

During the years 1959-1969 Grant formulated a tight complex of thought about the relation of time, ontology and technology. This decade is marked by a deep engagement with Heidegger and Nietzsche. Grant found in Heidegger the expression of several themes which had already developed important roles in his perception of contemporary society.[108] He concurred with Heidegger that, "Technology is the metaphysics of our age…it is the way being appears to us, and certainly we're rushing into the future with no categories by which we can judge it."[109]

For Grant, the actual machines of science and technology are the *signs* of specific ways of thinking which need analysis, the surface manifestations by which we grasp the uniqueness of our age, in the hope of understanding its worldwide appeal.[110] Grant examines the modern inability to think of any boundaries to technology and flags up the importance of the contemporary crisis about what should be made and unmade. The fact that in our material making we find it impossible to think clearly about technological frontiers leads us into a much wider examination of *what* we understand ourselves to be doing with our making and unmaking.[111]

Grant's analysis aims to provide an opening into how this lack might be addressed. He utilizes Heidegger's conceptual tools to illustrate in detail that once we have decided upon the machines and ideals which govern our life together, the moral shape of our society has already been cast. He does this in order to draw out the points at

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[108] Joan E. O'Donovan, George Grant and the Twilight of Justice (Toronto: University of Toronto Press, 1984), 107, 117. O'Donovan's thorough exposition and critique of Grant's thought is marred by an insufficient reading of Heidegger which overlooks his search to limit Nietzsche's unfettered willing via an ontological and cultural reference for human making (cf. 167).

[109] Frank K. Flinn, "George Grant's Three Languages," in Chesterton Review 11:2 (May 1985): 155.

[110] George Grant, Technology and Justice (Notre Dame: University of Notre Dame Press, 1986), 14.

[111] George Grant, "Technology as Warning," in William Christian and Sheila Grant, eds., The George Grant Reader, (Toronto: University of Toronto Press, 1998), 410-415.

which we can and must change our thinking if we are to truly wrestle with rather than simply enact our technological fate. His quest is to come to a clearer understanding of the modern failure of imagination—and to understand how this failure relates to our habitual grasping for new technology. Based on the questions Grant raises here, Part II of this thesis will return to develop a more positive technological ethic, with many of Grant's most important themes coming into that discussion in chapter five (but not exclusively there).

### *Judging the Present*

Before we look at Grant's diagnosis of modernity, we must note his method of diagnosis. Grant believes that it is possible to read back from what we do, say, and make to our fundamental commitments, and thus his project assumes there is a central core of ideas out of which the modern technological age flows. His attempt to grasp this core he calls 'enucleation' or observant participation in the age. "In another age, it would have been proper to say that I am attempting to partake in the soul of modernity." This contrasts with the mode of modernity itself, Grant claims, which is to study things by objectifying and analyzing them in order to predict their future behavior. So Grant's methodology is an attempt to take Heidegger's observations about technological method seriously by replacing the project of prediction and control with an examination based on participation with, because "All descriptions or definitions of technique which place it outside ourselves hide from us what it is."[112] To externalize technique in order to study it is to hide the reality that technique is ourselves, that technology is ourselves in action. Clearly this project assumes what Heidegger has called *ekstasis*—to admit that we reside in a specific, all-encompassing horizon of knowledge, but still to believe we can imagine ourselves into another horizon in order to gauge our current position.

Grant's search is for the novelty of our age, and as a diagnostic tool in finding this novelty he looks at words we use and things we create for clues about our view of human

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[112] George Grant, Technology and Empire (Concord, Ontario: Anansi, 1969), 137.

nature and destiny. A society's rites of passage, its sacred times and spaces, its iconographic representations, and its places of pilgrimage help us see the locuses which claim its devotion.[113] Grant implicitly utilizes the thought analysis laid out with Heidegger's temple analogy which illustrated that by studying the art of the Greeks we have some access to their thought world. Similarly, by studying our most important symbols and artifacts and political goals, our conceptual cosmos may be likewise made more explicit.

In his later work Grant sharpens this procedure by adding that not only do our rites and shrines provide a diagnostic tool, but they also demand a certain way of life from us. In agreeing together to construct a certain society a fate is cast. Historical necessity is thus the material embodiment of society's considered judgments about the good.[114] The world we create is marked by what we love, whether it be procedure or result, corporate or individual, local or global. Here again Heidegger's thought is influential as Grant utilizes his axiom about the transmission of ideas to great effect: ideas must be transmitted by creating adherents—and all social action, all work, is moved by adherence to ideas. I take Grant's thought to be concerned with understanding the role technology plays in relation to the teaching "There is nothing outside of a man which by going into him can defile him, but the things which come out of a man are what defile him" (Mark 7:15). Foucault reverses the route of examination of the impact of technology, being concerned with illustrating the role technology plays in clouding our eyes as in the teaching, "If your eye is not sound, your whole body will be full of darkness (Matthew 6:23).

### *Axioms of our Age (or Modernity: What is that?)*

Our reading of Grant will trace that nucleus of four interconnected ideas which he understands to uniquely characterize our age. The first is that history is a human creation. This belief about history rests on a second affirmation—that history is a theater for will.

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[113] George P. Grant, Philosophy in the Mass Age (New York: Hill and Wang, Inc., 1960), 29.

[114] George Grant, Lament for a Nation (Ottowa: Carleton University Press, 1995), 104.

This assumes in turn a third thesis about human freedom—that it is the basic attribute of humanity. Finally, the evidence provided by examination of our artifacts is that we understand this will to be actualized through the agency of mathematecized reason.

## Time as History

Grant's most helpful addition to our discussion of technology is to make explicit Nietzsche's role in shaping the modern mind. He, more than any other philosopher, made explicit the Western belief that humans must make meaning by making history. Our age is novel in many ways, but the novelty that most directly urges a limitless technological remaking is our belief in time as history. The Guinness Book of World Records, for instance, is systematically structured by the concept of time as history. It records the leaps of "progress" in any given human performance judged in terms of duration or distance or time or number on the assumption that these acts are the milestones of human history. We might compare such a project, and its contemporary popularity, with the very different medieval method of cataloging, which was pursued as a classification and ordering of things which were assumed to have eternal and unchanging material structures.

Grant draws an extended contrast between the view of time as history and the ancient Greek understanding of time. For the Greeks truth was eternal, and good human willing sought the temporal embodiment of this eternal truth. For them, time itself was meaningless, being simply the medium in which humans attempted to reflect and realize the eternal.[115] Modern thought immanentizes this distinction, making judgments of the good dependent upon events in history. This revision brings the human shaping of history to prominence by emphasizing the moments of its triumphant "progress." Our lack of

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[115] Colin Gunton and others rightly warn of oversimplifications about antique views of time. While agreeing with Grant that contemporary thought reverses the pervasive *bias* of the antique view of time he sharpens Grant's reading by saying that for the Greeks, "The logic of eternity—the justice of Zeus—embraces that of time, not denying it, but shaping and controlling it." Colin Gunton, The One, the Three and the Many: God, Creation and the Culture of Modernity. The Bampton Lectures 1992 (Cambridge, Cambridge University Press,1993), 79.

surprise at phrases like "the end of history" reveals the centrality and importance of our root belief that history is a human project. The ancient Greeks would simply have been unable to think this thought.[116] Through the history-centered thought of Marx and other western thinkers this modern focus on the making of history has also come to deeply mark the thinking of eastern cultures. Thus, in an important sense, the culture of the modern west has become global. In the technological age, the eternal is not that which is immutable and overarching all time, but the limitless possibilities of human activity in space and time for making a future.[117]

Christianity, Grant contends, first made time as history thinkable. With the introduction of the idea of the incarnation, the immutable God of the Greeks was permanently transformed by being pictured as entering history to save men, making events in time necessary precursors to the final redemption of humanity. Before Christianity entered the scene, the thought of the Jews had already made Israel and its historical narrative meaningful as an agent of redemption. The doctrine of the incarnation takes this historical redemption up into God Himself. Thus it was uniquely the doctrine of the incarnation which raised the status of the overcoming of evil in time to prominence in western thought.[118]

A critical conclusion for Grant is that the modern idea of progress is the Christian view of salvation in history shorn of its transcendent, eternal term by a misunderstanding of the nature of human freedom. With the death of belief in God, modern humanism was born with its pseudo-Christian morality and Christian view of history—reinterpreted as an optimistic view of progress toward a future golden age. Such optimism turns to reject the God who limits the action of humanity in the historical project of alleviating evil within history. This is a profoundly different humanism from that of the ancients, whose more melancholy and resigned form of humanism consisted of wisdom designed to make the best of the unmanageable vicissitudes of life.[119]

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[116] Grant, Philosophy, 32-35.

[117] Grant, Philosophy, 37.

[118] Grant, Philosophy, 56-60.

[119] Grant, Philosophy, 61-63.

As indicated, Grant understands Marxism to have provided the most transparent vehicle for this post-Christian humanism, and, not coincidentally, the most transparent justification for technological humanism. It boldly asserts the moral claim which grounds the extensive modern investment in science and technology: salvation from evil is possible for all through the practical work of creating and correctly using technology. Marx distilled the essence of the moral humanism which sustains the work of modern scientists and engineers: their work was the material medium for the alleviation of human misery in history.[120]

Marx's articulation of this secular salvation raised temporality to a role of prominence by discarding the notion of eternal truth, as Kant's attempt to preserve it had also previously done. Kant attempted to situate human history-making within the ambit of eternal truth by conceiving rationality as eternal and thus above human history. In this way the static eternal of Platonism was maintained in Idealism as human eternal reason. Because rational statements (like 2+2 =4) appear to be eternally true, Kant asserted them to claim and guide humanity's history-making work. Only in this Kantian form does any concept of eternal truth enter the modern public sphere, Grant argues. Modern liberal political theory is the most important heir to the Kantian philosophical framework in understanding justice to be grounded in the rationally informed consent which may be given or withheld by every rational agent.[121]

Grant's late work Time as History brings this line of reasoning to a crescendo. He has already indicated ways in which the ersatz eternal of the idealists (typified in Kant) placed the historical subject as knower in a central position. Thus even appeals to unchanging truth have an admixture of temporal reference not present in Greek thought. The predominance of popular modes of thought, however, speak much more bluntly of "making" history, or in other contexts speak as if history demands, commands, requires, teaches, etc. This use of the word history is peculiar to modernity—and is thus useful in knowing ourselves as moderns. Modern humanity easily and most readily defines itself as a being whose access to knowledge is through the historical, as indicated by the huge

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[120] Grant, Philosophy, 76-78.

[121] George P. Grant, English Speaking Justice (Notre Dame: University of Notre Dame Press, 1974), 26.

conceptual influence of thinkers like Darwin, Freud, Marx and Nietzsche. Here an unprecedented weight is placed on the importance of the coming-to-be of knowledge, its genealogy. "[T]he greatest difference between the ancient and modern accounts of knowledge is this modern concentration on the genesis of something in order to know it."[122] History, the human context in which we are not only made but actively make, is sharply distinguished from natural causality. In modern thought human history rather than the natural given is the essential ingredient in true knowledge.

What does Grant understand to be the implications of this shift in the grounding of knowledge? On one hand technology is seen as the *participation* of man with the upward ascent of nature as evolution ever elaborates our movement from the primordial sea. On the other hand technology is also viewed as the method by which humanity *overcomes* unordered nature. It is natural that the two languages should coalesce in praising such technological feats as setting foot on the moon. Man is seen not only as the finest product of evolution, but as its spearhead who can consciously direct the very process from which it came forth.[123]

Modern political philosophies have taken the historical basis of knowledge to be axiomatic. Marxism, democratic liberalism, and national socialism have each called individuals to be resolute in their actions so that the future may be mastered, and a just society constructed. At the heart of the view of time as history is a combination of future-orientation with the will to mastery. "The more we are concentrated on the future as the most fascinating reality, the more we become concentrated on that side of our existence that is concerned with making things happen."[124] The modern, and especially the modern *American* self-perception, from whence the technological empire arises, is thought almost

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[122] George Grant, Time as History, ed. William Christian (Toronto: University of Toronto Press, 1995), 11.

[123] Grant, Time as History, 12. If the open-ended metaphor of evolution is to be squared with God's sabbath declaration that creation is good and complete (chapter five), then serious conceptual work remains to be done in explanation of how we might affirm our material being as a good and complete gift while simultaneously affirming that biological order is provisional because it is moving toward a higher ontological perfection. Anthony Baker touches on this issue in "Theology and the Crisis in Darwinism," Modern Theology 18.2 (April 2002), 183-216.

[124] Grant, Time as History, 19-20.

exclusively in terms of time as progress, and calls for human action to festoon history with ever greater crowning achievements. It is in this light, says O'Donovan, that "Grant views 'history' as the central religious and moral idea of our age."[125]

Grant believes that this observation forces on us the following question: Is human action judged in terms of how well it has shaped history, or as it conforms to some more stable order within or outside of the universe? If the latter, then an account of natural or divine order must renounce history-making as an animating concept, seeking instead to live wisely within the created order in the present. When viewing time as history the priority is reversed: today serves only tomorrow, for our today is judged by the tomorrow it shapes.[126] "Ours has been a dynamic civilization and that dynamism has related to the fact that our apprehension of temporality was concentrated on the future. 'Has been' and 'is now' weakened in our consciousness compared with 'will be.'"[127] Both this focus on the future and the centrality of the will are necessary to understand the seductiveness of technological progress.

The Good as Activity

We have already uncovered the second central affirmation of modern thought which is contained within the first: that will is the central feature of modern anthropology.

> …one is forced to touch…upon the most difficult matter which faces anybody who wishes to understand technology. This is the attempt to articulate that primal western affirmation which stands shaping our whole civilization, before modern science and technology, before liberalism and capitalism, before our philosophies and theologies. It is present in all of us, and yet hidden to all of us… In all its unfathomedness, the closest I can come to it is the affirmation of human beings as 'will'…[128]

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[125] O'Donovan, Twilight of Justice, 155.

[126] Grant, Philosophy, 51. Here Grant uncovers the fatal conceptual flaw of technology assessment.

[127] Grant, Time as History, 20.

[128] Grant, English Speaking Justice, 63-64.

To substantiate this observation Grant again turns to examine the power of Marxism in the modern world. Why has it exerted such great influence? First, it is a humanism of universal salvation, and second, it proposes concrete and practical guidelines for that salvation. Its power lies in its story of evil being overcome in this world, and here its dependence on Judeo-Christian ideas about history is patent. This hope is not for a future whose arrival is unpredictable, but is a salvation to be created by contemporary human beings, acting within and upon the forces already existing in our societies. Thus Marx was able to speak about human action in fluid terms, describing moral behavior as the correct practical alleviation of the world's evils. This explains his high estimation of technology, which he married in the modern fashion to scientific endeavor, as the means whereby humanity would be freed from the evils of pain, want, and work. Marx offered scientists and technologists (no longer conceivable as separate groups) the ultimate moral high-ground, conceiving the scientist as ethical precisely in the function of her work because the work itself serves the alleviation of suffering as long as its products are equitably distributed.[129]

Grant points out that the caption on Marx's Highgate tombstone crystallizes this modern quest: "The philosophers have only interpreted the world in various ways. The point however is to change it."[130] Here only the manipulation of material reality is conceived as producing human meaning and good. This language of will which is so highly valued in our culture is found in many civilizations, but its centrality in western thought is unique. Grant concludes, "To enucleate the conception of time as history must then be to think the orientation to the future together with the will to mastery."[131] On this view, reflection, worship, and tradition are considered meaningless activities unless harnessed to action in which we do violence to the world, closing down an option which was formerly open, asserting that, as far as we are concerned, this rather than that will come to be. To will announces that we are serious, choosing to actualize ourselves and

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[129] Grant, Philosophy, 76-78.

[130] Grant, Time as History, 23.

[131] Grant, Time as History, 17.

our view of the world against the one who simply thinks, or impotently desires without acting. Grant notes that in Greek thought willing was intended to bring into immediate being the beauty of the eternally noble and beautiful. But modern willing has a much larger task—it must bring into being a good future, by conquering an indifferent nature and making it good for us.[132]

According to Grant, realizing this helps us to see our age's science and technology more accurately. Scientists do not "discover" and technologists "put science to use." This is a false description of science. Because willing or technology is the means of bringing the good life to all, science becomes in all but the rarest cases an early stage of the technological project.[133] Grant is not alone in making this observation. Historians of technology also note that what is novel about modern science is the subsuming of the wonder-driven exploration commonly thought of as science within the application of scientific knowledge we call technology. Science has become an arm of production.[134]

The English term "technology" is symptomatic of this novelty with its confusing admixture of the root words for making (techne) and study (logos), Grant contends. "[M]odern technology is not simply an extension of human making through the power of a perfected science, but is a new account of what it is to know and to make in which both activities are changed by their co-penetration," says Grant. "We hide the difficulty of thinking that novelty, because in our implied 'histories' it is assumed that we can understand the novelty only from within its own account of knowing, which has itself become a kind of making."[135] To the Greeks, art was considered a species of knowing the contingent, the accidental and historical rather than the eternal. Science, by contrast, was necessarily knowledge of what *must* be. This conceptuality established a firm separation in the types of knowledge and activity of the two disciplines. In contrast, modern

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[132] Grant, Time as History, 23-25.

[133] Grant, Time as History, 25-27.

[134] James E. McClellan III and Harold Dorn, Science and Technology in World History (Baltimore, Md.: The Johns Hopkins University Press, 1999), chapter 17.

[135] Grant, "Thinking About Technology," in Technology and Justice, 13.

scientific knowing is entwined with intent to use.[136] This co-penetration of knowing and willing means that reason which is not addressed to willing is considered superfluous or inefficient. Reason itself is thus annexed not to control power, but as the mode of the extension of power.[137] It is this interpenetration of knowing and willing which is the most appropriate descriptor of modern society—the technological society. "I mean by [technology] the endeavor which summons forth everything (both human and non-human) to give its reason, and through the summoning forth of those reasons turns the world into potential raw material, at the disposal of our 'creative' wills. The definition is circular in the sense that what is 'creatively' willed is further expansion of that union of knowing and making given in the linguistic union of 'techne' and 'logos.'"[138]

Grant is not suggesting that there have not been significant and laudable outcomes of the technological project, nor denigrating that desire to build a world-wide society of free and equal people. The desire to alleviate human suffering is itself noble, and technology has served well in this pursuit. But as we shall see, a technological habit was formed in this period in which a linkage of justice with technological progress was so tightly formed that when modern humanity hopes to promote justice, the modality for its imagination is technological.

## Freedom Unfettered

The novelties of modern thought Grant has traced have profoundly shaped the modern conception of freedom. To make history and will basic categories of thinking is to posit a definition of human freedom in which freedom is conceived as having no enduring limit. Grant thought Kant first made the autonomy of the will explicit to western

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[136] Grant, Technology and Justice, 14.

[137] Grant, Philosophy, 21.

[138] Grant, "Justice and the Right to Life," in The George Grant Reader, 117.

moral philosophy in making subjectivity central to true knowledge.[139] In Kant's work the reasoning subject holds the world before itself, representing it to itself as an object out of which truth is extracted by the activity of the knower.

But then at the height of that new system of representation, namely in the question of justice, he does not cross the Rubicon to the new account of justice that is required by the new account of truth, proceeding from the new account of reason. He offers the categorical imperative, that morality is the one fact of reason. He offers a fundamental equality of persons, that is an account of justice that comes out from the older account of truth, which was based not on the first principle of subjectivity, but on the eternal order.[140]

Yet Kant's attempt to interject this principle of equality was bound to be undermined by his assertion of the centrality of the subject in defining the *content* of this equality.

Two biographical experiences came, for Grant, to expose this contradiction. The first was the specter of Vietnam, which brought into focus the inner necessity of the technological empire to be violently expansionist and therefore unjustly imperialist. But a second experience, the legalization of abortion, convinced him that modern technological society could not accept any truth but historical truth, and therefore could not be just. Joan O'Donovan comments, "If the Vietnam war revealed the shadowy contours of liberal justice at the outposts of the American empire, then abortion reveals these same contours in its heartland."[141] Grant argues that with the Roe v. Wade decision of the American Supreme Court the unhitching of human freedom from the guiding lights of respect for ontological order reached a critical point in western society. With this decision American society began to roll back a conception of justice based on an account of what ontologically *is* in favor of a conception grounded on the autonomous individual and the priority of historical *possibility*. Here blooms the ontology of the age, which, looking at the ontological claim of the other, sees not an other but simply a standing reserve. Such

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[139] The George Grant Reader, 222. We might also credit this revolution to Descartes as Heidegger does, while agreeing with Grant that the shift truly becomes a mass phenomenon through the work of Kant.

[140] The George Grant Reader, 225.

thinking is systematized by philosophical pragmatism, which understands the good as the emancipation of the passions in order to free humanity to pursue its desires, bounded only by others' freedom to do the same.[142]

Such legal establishment of the freedom to pursue our desires makes plain the modern view of human nature, yet it does not complete this thought by allowing all desires to be considered of equal value. Here again, action alone is understood to be a creator of moral good, meaning that the only proper use of freedom is active willing. History and meaning must be pulled from the chaos of the universe by the grasp of the willing individual. O'Donovan summarizes,

> Thus, the language of 'willing,' like that of 'history,' has three levels of reference for Grant. It refers to a universal aspect of human action, to a specifically modern interpretation of human action, and to a peculiar reality of modern action. These strands of meaning are correlative or interdependent: each must be thought along with and in terms of the others. This is so because the word 'willing,' like the word 'history,' makes present a historical and experiential totality proceeding from 'some central source,' from an animating principle, which, however, is not distinct from the manifold aspects or 'expressions' of the totality. It follows that thinking this animating principle should be a movement among its manifold expressions that grasps their interpenetration, the refraction of each on the others. This movement is what Grant means by 'enucleation.' He has, therefore, tried to enucleate the modern conception of 'history' by enucleating the modern language of 'willing' through which this single totality expresses itself.[143]

Nietzsche predicted the incoherence of attempts to ground universal equality in an affirmation of the primal will. His solution was the consistent one—to embrace an unfettered willing. The overman is the solution to this incoherence, the one who gladly takes up the empty mantle of the moral-creating God. But Nietzsche believed that unlike

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[141] O'Donovan, Twilight of Justice, 149, cf. 49.

[142] Grant, Lament for a Nation, 71-80; Grant, "Justice and the Right to Life," in The George Grant Reader, 110; Grant, Technology and Justice, 32.

[143] O'Donovan, Twilight of Justice, 115.

the nihilist who wills out of a desire for revenge, the overman will joy in willing, refusing vengeful willing. Grant notes that this new anthropology has permeated the modern world through Freud, Weber, and many other disciples of Nietzsche. This anthropology posits that,

> The elemental in man is an 'it,' that is, an impersonal chaos of instincts out of which comes forth as epiphenomena, reason and morality. It was once believed that the irrational in man existed to be subordinated to the rational. In Nietzsche this is denied. This does not, however, free us from thinking. It simply means that thinking is carried on over an abyss that it can never fathom. Philosophy is simply the highest form of 'the will to power.'[144]

In being the first to think this thought in its entirety, Nietzsche did not create the modern fate but unfolded it by explicitly revealing it for those who are its inheritors. He thought time as history comprehensively and urged the relinquishing of our attempts to define ourselves with static ideas instead of releasing ourselves into becoming. Humanity is simply a bridge from the animals to something more—or at least can be this something more if only we could let go of being 'humans'. This is the yawning abyss into which we gaze and with which we must learn to live. Truth, science, morality and the soul: all are attempts to mitigate the pain of this vision of becoming which cramp the willing of free creation and the self-transcending of humanity. To be great is to create new horizons from which humans can orient themselves. Since what we are is becoming and history, and nothing is defined by nature, we ourselves cannot be finally defined except against a horizon of our own making. Not being defined, we can have no purpose, save the creation of our own striving and the positing of ever more far-reaching horizons.

This view of time, human action and freedom thrives on an absolute denial of the moral value of the ontologically given, or eternal truth, and brings out the tragic paradox of the modern conception of freedom. This absolute freedom as a practical and theoretical ideal *is* the modern tradition, and "…is the dissolvent of all traditions outside itself and

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[144] Grant, Time as History, 51.

the negation of tradition as such."[145] This negation, Grant contends, gives us our first glimpse of the modern tyranny.

> [W]hen we use this language of 'freedom' and 'values' to ask seriously what substantive 'values' our freedom should create, it is clear that such values cannot be discovered in 'nature' because in the light of modern science nature is objectively conceived as indifferent to values. (Every sophomore who studies philosophy in the English-speaking world is able to disprove the 'naturalistic fallacy,' namely that statements about what ought to be cannot be inferred solely from statements about what is.) Where, then, does our freedom to create values find its content? When that belief in freedom expresses itself seriously (that is, politically and not simply as a doctrine of individual fulfillment), the content of man's freedom becomes the actualizing of freedom for all men. The purpose of action becomes the building of the universal and homogenous state—the society in which all men are free and equal and increasingly able to realize their concrete individuality.
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> But in order for all to be free, the aberrant in human relationships must be rigorously suppressed.
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> As we push toward the goal we envisage, our need of technology for its realization becomes ever more pressing. If all men are to become free and equal within the enormous institutions necessary to technology, then the overcoming of chance must be more and more rigorously pursued and applied—particularly that overcoming of chance among human beings which we expect through the development of the modern sciences.[146]
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> The renunciation of limits to willing leads, paradoxically, either to chaos or a homogenizing politic, a politic of mathematical equality.

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[145] O'Donovan, Twilight of Justice, 60.

[146] Grant, "America: A New World," in The George Grant Reader, 405-406.

Mathematecized Reason

According to Grant, human thought in the age of progress is characterized by its mathematical roots and its focus on efficiency. Taking up Heidegger's thesis that the modern age was inaugurated with the invention of modern physics, Grant takes pains to point out the many practical ways that mathematecized reason has and is penetrating every arena of contemporary action. Grant notes that it is difficult to compare ancient and modern accounts of physics, but we can assert with confidence that Greek physics did not, like modern physics, produce knowledge of the kind which put the energies of nature at their disposal. Our physics lays a perceptual grid over all things which assumes that all energy and motion are convertible and interchangeable. To possess such knowledge is to grasp by definition the steps needed to effect this conversion. That Einstein felt compelled to advise Roosevelt that modern discoveries in physics would make it possible for an atom bomb to be built makes the modern novelty more obvious—because no such communication was conceivable within the ambit of ancient science.[147]

Computers are emblematic of modern science with its grounding in mathematics, Grant argues. If the steam steel press is the image of Newtonian physics and mathematics, the computer is its contemporary counterpart. The computer is born out of a paradigm of knowledge in which truth is reducible to a numerical value, and its existence has required in turn a fuller realization of the western paradigm of knowledge. The computer makes a subtle but far reaching distinction between knowledge and information which accelerates the tendency of modern thought to examine all things for the production of "objective" knowledge.[148] This mathematicized gaze is not confined to the study of the natural world, but has become the method of choice for studying (with an eye to controlling or at least predicting) human behavior. Modern technology begins with the defining of knowledge using a mathematical paradigm and becomes a behaviorism explained in terms of

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[147] Grant, Technology and Justice, 13-14.

[148] Grant, Technology and Justice, 21-23.

algebra,[149] as summed up in Freud's contention that, "in reality, psychoanalysis is a method of investigation, an impartial instrument like, say, the infinitesimal calculus."[150]

Modern maths and physics thus necessarily become the foundation-stock of all university disciplines committed to "truth", leading, for instance, to the development of "value free" social sciences, Grant continues. Business, industry, and government increasingly need information about the individuals who are within their scope of influence, and sociologists carry out the production of this information. Such information is only usable, however, in a "value free" format. The social sciences so developed cannot simply provide information, but are part of a system which increasingly closely monitors and manipulates the inhabitants of the technological society.

Thus the fact-value distinction, which was intended to provide "value free" information rather than simply providing "facts" to corporations and government agencies, actually works to establish a monism of technical values, Grant argues. By describing human society through a paradigm which excluded the non-numerical, it undermined the validity of the type of non-empirical thinking which might be able to brake the "triumphant chariot of technology." The fact-value distinction upon which computers and mathematecized science depend must assume that morality itself is a collection of posited values rather than a knowledge-set based on the truth of the cosmos itself. The possibility or at least relevance of such moral knowledge has been systematically undermined by questioning whether there is knowledge without experimental method, skepticism about whether it is possible to speak of better or worse human purposes, and the affirmation that humans must will meaning amid a primal chaos. Having sundered facts from values, Grant claims, the sciences looked to the humanities for the "values" with which society might be guided. Unfortunately the philosophers too had taken the presuppositions of modernity to heart, retreating into analytical and historicist research which was unable to say anything beyond "this is how people once thought." "The public hope that the humanities would fulfill a positive moral

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[149] Grant, Technology and Justice, 9, 13, 99.

[150] Sigmund Freud, The Future of an Illusion, 3rd ed., trans. W. D. Robson-Scott (London: The Hogarth Press, 1943), 64.

role was, therefore, vitiated by the fact that the best professionals of these disciplines did not see their activity in this way."[151]

Grant concludes that the hegemony of mathematical reason has undermined any real pluralism about the good end of humanity in favor of technological moral monism.[152]

> [P]luralism has not been the result in those societies where modern liberalism has prevailed. Western men live in a society the public realm of which is dominated by a monolithic certainty about excellence—namely that the pursuit of technological efficiency is the chief purpose for which the community exists. When modern liberals… have criticized the idea of human excellence, they may have thought they were clearing the ground of religious and metaphysical superstitions which stood in the way of the liberty of the individual. Rather they were serving the social purpose of legitimizing the totally technological society by destroying anything from before the age of progress which might inhibit its victory. Modern liberalism has been a superb legitimizing instrument for the technological society, because at one and the same time it has been able to criticize out of the popular mind the general idea of human excellence, and yet put no barrier in the way of that particular idea of excellence which in fact determines the actions of the most powerful in our society.[153]

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[151] Grant, "The University Curriculum," in Technology and Empire, 123.

[152] Theodor Adorno and Max Horkheimer are also well known for this claim as made in The Dialectic of Enlightenment, trans. John Cumming (London: Verso Editions, 1979).

[153] Grant, "The University Curriculum," in Technology and Empire, 128-129. Though Grant forgoes the exercise, we might easily have traced the penetration of mathematecized rationality into a range of modern practices including musical composition, cf. Roger W. H. Savage, Structure and Sorcery: The Aesthetics of Post-War Serial Composition and Indeterminacy, ed. John Caldwell, Oxford University (New York: Garland Publishing, 1989); literature, cf. Donald F. Theall, James Joyce's Techno-Poetics (Toronto: University of Toronto Press, 1997); perceptions and practices of empire building, cf. John Keay, The Great Arc: The Dramatic Tale of How India was Mapped and Everest Named (London: Harper Collins Publishers, 2000); contemporary chain business siting, cf. Eric Schlosser, Fast Food Nation: What the All-American Meal is Doing to the World (London: Allen Lane, Penguin Press, 2001); and the relation of the abstraction of money on the growth of modern capitalism, cf. Lewis Mumford, Technics and Civilization.

## *The Natural Outcome of Modern Thought*

We turn now to examine two broad categories of estrangement Grant believes have resulted from understanding the contemporary ideal of human excellence in this way. First, technology increasingly turns from being used to alleviate human suffering to controlling society. Second, our moral reasoning is progressively enfeebled by our rejection of the categories of thought which make moral deliberation possible.

### *1) Technologies of the Helmsman*

Grant contends that the outcome of this constellation of thought is a widespread view that humanity itself can be understood as a standing reserve. He explores Heidegger's description of the birth of our age's tyranny under the heading of technologies of the helmsman.[154] While the ancient Greeks understood political tyranny as the despotic rule of one man over many, Grant points out that,

> [W]hat distinguishes modern tyranny from ancient tyranny is the presence in the modern world of a science that issues in the conquest of nature and the belief in the possibility of the popularization of philosophy and science. Both the possibilities were known to the ancient philosophers. "But the classics rejected them as 'unnatural,' *i.e.*, as destructive of humanity. They did not dream of present day tyranny because they regarded its basic presuppositions as so preposterous that they turned their imaginations in entirely different directions."[155]

Modern tyranny, by contrast, is the homogenization of society and its control by the sciences which were first developed to conquer the forces of nature. Grant argues that, once again, Christianity played a role in the genesis of modern tyranny by smoothing the transition from applying science to the natural world to applying it to human society. St.

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[154] Grant, English Speaking Justice, 9.

[155] Quoting Leo Strauss. Grant, Technology and Empire, 85.

Paul first thought the possibility of the homogenous state in that he saw all individual and national difference radically relativised and replaced by a new identity in Christ. The Greeks could never reach this place because of the ineradicable, ontological divide between the slave and master. Christian thought erased this divide, an erasure that, with the demise of God, has made thinkable the project of remaking any aspect across the breadth of human society.[156]

It is the possibility of the alleviation of human suffering which validates modern attempts to set up such a state. But this justification seems to have lost its grounding in the relief of suffering, Grant contends. "[T]echnological progress is now being pursued not first and foremost to free all men from work and disease, but for the investigation and conquest of the infinite spaces around us. The vastness of such a task suggests that modern society is committed to unlimited technological progress for its own sake."[157] Yet this desire for progress and conquest does not fully eclipse its original focus on making the world good for humans, and so turns its gaze to the ever more intimate conquest of chance (now understood as the root of suffering) in human affairs. The scientific overcoming of nature, once harnessed for our use, now becomes the empowering of select individuals to shape society in unprecedented ways.[158] In this way "...absolute freedom and absolute determinism call forth each other."[159]

That liberalism is technological in its essence is revealed, Grant contends, in noting that beneath the rhetoric of democratic difference and the importance of the relief of suffering through material progress is a demand for a high level of social conformity.

> [D]ifferences in the technological state are able to exist only in private activities: how we eat; how we mate; how we practice ceremonies. Some like pizza, some like steaks, some like girls,

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[156] Grant, Technology and Empire, 87. Grant is correct in pointing out the centrality of the remaking of political life indicated in Paul's writing, and it will be important to make clear in chapter four that the transformation of the Christian community does not homogenize but both values and creates important varieties of political difference.

[157] Grant, Technology and Empire, 101.

[158] Grant, Lament for a Nation, 67-68; Grant, Philosophy in the Mass Age, 15-16.

[159] O'Donovan, Twilight of Justice, 91.

some like boys; some like synagogue, some like the mass. But we all do it in churches, motels, restaurants indistinguishable from the Atlantic to the Pacific.[160]

Why is this a tyranny? Because having defined justice as what we agree on, then we must relegate to the private sphere anything which might threaten this homogeneity. This bifurcation muzzles dissent against the continual homogenizing revolutions which sweep our culture, making us ever less able to maintain a publicly acceptable distinction between what we *can* do (technically) and what we *should* do, morally. By definition, it is the separation of the public from the private which the technological world demands, and this separation creates tyranny.[161]

The Implications of this Homogenizing Tyranny

*a) The Undermining of True Democracy and Political Theory*

At the level of practice, when the masses are manipulated then democracy becomes a farce. But conceptually, "…political reflection today is bound to a body of political doctrine ('the religion of democracy,' 'the religion of progress, mastery and power') which has abandoned the principles and distinctions without which no public, including the modern public, can be understood."[162] According to Grant, this means that the most pressing question of our political life, how to regulate technological change, is problematized by the rooting of political thought in self-interest as defined in the terms of progress itself. When both conservatives and liberals espouse a technological vision of progress, then mathematecized technological rationality has become hegemonic, and political choice *against* its power non-existent. By defining humans as holders of one rational share in the social contract the citizen's body is opened up for social manipulation which disregards any possible claims of material order. The technology of human control comes to be part of our social fabric, with its apparatus of artisans

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[160] Grant, Technology and Empire, 26.

[161] Robert Song, Christianity and Liberal Society (Oxford: Clarendon Press, 1997), 115-116.

[162] O'Donovan, Twilight of Justice, 66.

remaking humanity in extreme ways such as behavior modification, genetic engineering, and population control by abortion, and in a myriad of not so extreme ways, such as the swaying of opinion by psychological research and media manipulation.[163]

*b) Education Must Become Technique-Centered*

If nations wish to maintain their technological advantage they must structure their educational systems so that the necessary technicians will be available to support this endeavor, Grant contends. This technization of education undermines cultural distinctiveness because the needs of industry mitigate against non-technical ways of educating youth. Nations are thus faced with the either/or of maintaining their cultural heritage through non-technical emphases in their educational curriculum, or becoming non-technically-educated laborers in their own industrialization.[164]

At another level, mathematecized reason infects all levels of scholarship in the university. In "The University Curriculum," Grant notes the wide ranging impact of fact-value thinking on views of the good.[165] Growing from his lifelong acrimonious struggles over university curricula, Grant developed a fine tuned and oft elucidated distinction between researchers, who reveled in their systems of schematization, and scholars, who combed historical traditions for wisdom in living today.[166] Grant argues that technologized views of knowledge systematically skew education by devaluing the inculcation of wonder in favor of the skills of mastery.[167] What modern society believes itself to need are competent technicians, and the universities are coming to see their sole task as cultivating those sciences which issue in the mastery of human and non-human nature. "It is this growing victory of power over wonder which is the basis of the

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[163] Grant, English Speaking Justice, 9, 44.

[164] Grant, English Speaking Justice, 90-91.

[165] Grant, "The University Curriculum," in Technology and Empire, 119.

[166] Grant, Technology and Justice, 37.

[167] Grant, "The University Curriculum," in Technology and Empire, 113.

proposition that the modern sciences can best be understood as a unity around the idea of mastery."[168]

### *c) Religious Communities Must Opt Out of "Progress" or Liberalize Their View of Human Nature*

Grant takes the example of the pressures of homogenization upon French-speaking Quebec to illustrate the dilemma which homogenization forces on religion. Grant believes that the intellectual core of French Canada, and the anchor of its cultural distinctiveness amid the technological dynamo which is North America, is its old-world Catholicism. What will happen to Catholic anthropology when Catholics are asked to shape society through the new sciences? Will Quebecois abstain from all behavior control, genetic manipulation, and similar social trends? Will the Catholic church of Quebec become like the Protestant church in America which has no conflict with the premises of the technological empire? If it gives up its distinctive anthropology, its moral heart will be removed, and Quebec will blend into industrialized America with only residual patterns of language and personal habit to show for its distinctive history.[169] Where churches have liberalized to accept the dominant mode of reasoning, "public religion has become an unimportant litany of objectified self-righteousness necessary for the more anal of our managers."[170]

### *d) Justice is Defined as the Extension of Technical Progress to All*

Grant contends that when justice is severed from ontology and becomes simply a value posited by subjective agents, it becomes impossible to define. This allows him to put a bracing question to contemporary contractarian liberalism: Can a substantive definition of social justice be derived from a political procedure which claims to be

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[168] Grant, "The University Curriculum," in Technology and Empire, 116.

[169] Grant, Lament for a Nation, 94.

[170] Grant, Technology and Empire, 24.

morally neutral because based on contracts between self-interested individuals? What will be the content of such justice severed from an eternal or created referent? Without this referent justice is simply a construct for happy social living, a product of our willing. [171] This will-to-will reading of justice is the polar opposite to the ancient reading of justice as something given, and makes justice a matter of empirical calculation, a justice which cannot, therefore, be worthy of our love.[172] Grant is unsurprised that the society which understands justice in this way has fallen prey to an insatiable will for technological expansion. Having defined the structural form of justice in this creative mode, only narrow possibilities are left for the material content of justice: equal goods or equal procedure. Such a view of justice cannot function without annihilating traditional moral qualms about protecting the weak in the pursuit of the "needs" of the masses, despite the tendency of the exploited majority to get together and insist on justice against the "creative" strong. Liberal contractarian thinkers believe themselves to be facing a technical problem about how to control technology, not realizing that contractarianism and technology come from the same root, and neither have the intellectual resources to say how any vision of the good or natural essence may count as an objection to a technological change. They are incapable of establishing *what* is not to be violated, or *why* people might be uniquely suited for equality,[173] and thus pave the way for justice as willing in which justice is building a better race, a race not fettered by hatred of the past but, as Nietzsche prefigured, transcending static morality which assumes that justice is due to all humans.[174]

At the culmination of this trend, Grant continues, the overcoming of chance through technology and the exploring of the unexplored replace the drive for freedom for all because the overcoming of chance has come to be *equated* with freedom for all.[175]

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[171] Grant, English Speaking Justice, 74, 80.

[172] Grant, "Faith and the Multiversity," in Technology and Justice, 61.

[173] Grant, "Justice and the Right to Life," in The George Grant Reader, 113, 117-19.

[174] Grant, Technology and Justice, 94-95.

[175] Grant, Technology and Empire, 138.

*e) A Vast and Violent Ideological Empire is Created*

In this new world the nation which dissents from the technological imperative comes under sustained attack. Grant's Canadian nationalism caused him to develop a hypersensitivity to the role of technology in modern imperialism, particularly the American technological empire which is the most powerful the world has ever known.[176] He battled those Canadians who hoped for stronger political ties with the United States based on a faith that superior technological power makes one a player in history, thus lending life meaning and purpose.[177] He contends that the American empire expands in part by spreading the faith that technology is power, and thrives on its reputation as the most effective purveyor of that power.[178] Imperialism, Grant notes, is as old as humanity itself, but what is masked in modern imperialism is its violence because technological progress is equated with justice. As we have seen, for Grant Vietnam made this injustice and violence blatantly apparent.[179] Liberation theologians have pointed out in their lands what Grant has argued from his Canadian perspective: that the technological vision of knowledge has masked the violence of the West's view of justice and equality.[180] The West has lost a view of justice, love and beauty with the advent of the technological way of knowing, yet because of their material want, the dispossessed believe the modern myth that their needs will be met by including them in the technological empire.[181]

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[176] Grant, "America: A New World," in The George Grant Reader, 400.

[177] Grant, Technology and Empire, 64.

[178] Ellul and Grant both note that entertainment is a central political tool in a technological society. Here the observation of the global power of Hollywood testifies to the world-wide reach of the technological empire. See Jacques Ellul, The Technological Society, trans. John Wilkinson, intro. Robert K. Merton (London: Jonathan Cape, 1964), chapter five, "Propaganda" and "Amusement."

[179] Grant, Technology and Empire, 72-74.

[180] Grant, Technology and Justice, 10. This statement must be immediately balanced by the caveat that the eloquent protests against the inequalities of technological justice by liberation theologians can be couched in problematic terms such as "the right to development," or using problematic assumptions derived from the Marxist premises Grant has criticized. See Alfred T. Hennelly, ed., trans., Liberation Theology: A Documentary History (New York: Orbis Books, 1990).

[181] Grant, Technology and Empire, 139.

We might summarize Grant's understanding of the implications of the homogenizing tyranny by saying that technology grew from a desire to overcome nature in hopes of relief from poverty and ignorance, but ends up desiring to homogenize humanity so that it is happy and well-controlled.[182]

### *2) "Scientific Neutrality" Hides the Meaning of our Decisions*

Technological society, Grant contends, is not only homogenizing and thus subversive of good government, but also progressively enfeebles our capacity for moral deliberation. Popular rhetoric insists that the novelty of the technological era is that it places ever more powerful tools at our disposal. But this instrumental view of technology masks the true depth of our predicament, thereby increasing our confusion. It is the language of instrumentality which causes us to make statements like, "The computer does not impose on us the ways it should be used." Such a statement is pernicious for three reasons. First, the construction of computers is based on modern mathematecized science which grounds (infects) all modern disciplines, creating a pressure that all knowledge be "objective" and therefore manipulable by mathematical machines. Second, as part of the mathematecized destiny of modern man, computers *do* impose in that their very use demands the spread of homogenizing ways of dealing with knowledge so that it is manipulable by such machines. Third, computers impose because they demand societies with large corporations and highly efficient infrastructures for their manufacture and use.

The problem of conceiving technology as neutral is that the true magnitude of the decision to build or use individual technologies, such as computers, is hidden. Grant comments, "Seventy five years ago somebody might have said "The automobile does not impose on us the ways it should be used", and who would have quarreled with that? Yet this would have been a deluded representation of the automobile."[183] This delusion is especially pernicious when the construction and use of computers accelerates

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[182] Grant, "Thinking About Technology," in Technology and Justice, 16-17.

[183] Grant, "Thinking About Technology," in Technology and Justice, 24-25.

homogenization within the ambit of a society already shot through with mathematecized accounts of reasoning.[184] Thus, conceiving technology in neutral terms reveals a problem at the heart of the modern way of thinking. Grant concludes,

"The computer does not impose on us the ways it *should* be used" asserts the essence of the modern view, which is that human ability freely determines what happens. It then puts that freedom in the service of the very 'should' which that same modern novelty has made provisional. The resolute mastery to which we are summoned in 'does not impose' is the very source of difficulty in apprehending goodness as 'should'. Therefore, the 'should' in the statement has only a masquerading resonance in the actions we are summoned to concerning computers… The statement therefore cushions us from the full impact of the novelties it asks us to consider… The coming to be of technology has required changes in what we think is good, what we think good is, how we conceive sanity and madness, justice and injustice, rationality and irrationality, beauty and ugliness… The result of this is that when we are deliberating in any practical situation our judgment acts rather like a mirror, which throws back the very metaphysic of the technology which we are supposed to be deliberating about in detail. The outcome is inevitably a decision for further technological development.[185]

Grant argues that the practical outcome of this deficiency in moral deliberation is seen when the only protest against technology that can be offered from within modern accounts of rationality is an empirical argument concerning projected harms of specific proposed technological developments. Implicit in this logic is a faith that in the long term technology will lead humanity to justice and equality. To have any hope of establishing that the justice or injustice of actions may be known in advance of empirical evidence, Grant contends, necessitates a stepping outside of the voluntarist technological rationality which grounds modernity.

According to Grant, to stay within voluntarist technological assumptions is to embrace a future without truly considering the impact of our actions. Technology overmasters us because we invest our energies in it without understanding the nature of

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[184] Grant, "Thinking About Technology," in Technology and Justice, 30.

[185] Grant, "Thinking About Technology," in Technology and Justice, 31-33.

our investment.[186] Yet an opportunity has been given to us, Grant believes, to look more closely at our investments in the technological society because the vast institutions needed for more powerful technologies force us to look again at the unfreedom within them, noting the various ways in which natural necessities have given way to man-made necessity.[187] Not only does technology define the ways that we do individual things, but it deeply shapes the distribution of our society's expenditure of resources and talent, by default using resources which might have been used to build a more truly just society.[188] Grant contends that our only tool of justice, technology, by tempting us to mechanized conceptions of justice, has sapped our creativity in reaching for a truly just society. Because technology is the ontology of the age, we are not as free as we claim to be to create any society we wish, but conceive and enact our communal choices from within our technological view of justice with its non-appreciation of ontological being.

Grant points out that by claiming that "technology is neutral in itself" we refuse deliberation about the future demands of technology and the present moral claim of technology upon us, marginalizing moral deliberation by limiting it to the evaluation of technology *after* we have already created it.[189] One either enacts the maxim, "Just because something could be, it does not follow that it should be," or, more likely in the age of progress, follows the maxim of atomic bomb pioneer Robert Oppenheimer, "…if something is technically sweet, go ahead and do it."[190] However much we might at points wish (and need) to revisit the empirical details of Grant's argument, I believe he has established a point essential to exposing the form of contemporary deliberation about new technology: that our usual forms of moral deliberation about new technology forego entirely any serious deliberation by conceiving such deliberation as grappling only with the *use* of objects and procedures which have been implemented on grounds prior to

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[186] Grant, "The Good or Values," in The George Grant Reader, 393.

[187] Grant, "America: A New World," in The George Grant Reader, 405-406.

[188] Grant, "Technology as Ontology," in The George Grant Reader, 421-422.

[189] Grant, "Technology as Ontology," in The George Grant Reader, 430-31; Grant, Technology and Justice, 24-26, 31-32.

[190] Grant, "Thinking About Technology," in Technology and Justice, 34.

explicit moral deliberation. To recover the possibility of moral deliberation, Grant says, we must seek to reopen questions which technological logic has prematurely closed.

### *Grant's Proposed Antidote: Sanity is Not Statistical*

Though Grant himself did not undertake the task, it is possible to summarize the considerations he developed which any successful counter to the technological way of thinking must take into account. The considerations highlighted by Grant's account will frame the development of the theological project of Part II.

1) Begin by attempting to see technology as it really is.

This may seem a trivial task, Grant points out, but because technology grows out of deeply held commitments we must not presume it to be simple. In one sense, seeing technology truly comprises a complete solution to the technological predicament.[191] Following Heidegger, Grant claims that our predicament will only appear in its full magnitude as we attentively examine cultures of other ages.[192] "Only in listening for the intimations of deprival can we live critically in the dynamo." [193] Putting a Christian turn on Heidegger's notion, he says that the first step is to "bring the darkness to light as darkness."[194]

2) After our attempt to see technology for what it is, the most obvious locus for counter action is to undermine the fact-value distinction of mathematecized reason.

How do we escape the fate imposed by our embrace of mathematecized reason? Grant notes that an obvious beginning point is to battle the fact-value distinction, rejuvenating the "common sense, reverence, communities and art (perhaps even finally

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[191] Grant, "Technology and Faith," in The George Grant Reader, 443.

[192] Grant, "Technology as Warning," in The George Grant Reader, 406.

[193] Grant, Technology and Empire, 141.

[194] Grant, "Technology as Ontology," in The George Grant Reader, 434.

sexuality)" which have been driven into near non-existence by mathematical homogenization.[195]

To illustrate…when I state that Bessie Touzel weighs 135 pounds I am stating a fact; but when I state that she is a noble human being I am simply expressing my value preferences…Value is seen as something external to the facts…This is to deny that the world apart from us is valuable, and to deny that the world is in itself good is the heart of blasphemy. In this sense the crisis of value in technology is nowhere better seen than in the social sciences which make the fact-value distinction. For in that very distinction is the denial that the world is in itself valuable. This is to leave the individual naked and alone in the dreadful pressure of time.[196]

3) One way to combat the fact-value distinction is to find a place for diversity, in nations and individuals.

Grant contends that the age of progress demands homogeneity of material existence—which can only be sustained by enforcing conformity in thought, from which the shape of our material existence emerges. Thus, to recover an appreciation of diversity is to combat the technological monism of modern society.

4) An antidote to the technological society must recognize its lack of an account of the good ordering of inner life by providing such an account.

As justice comes to be defined in terms of outer goods, Grant contends that an effective response must emphasize the good ordering of the inner life, including giving a place to what it is good to love.[197]

5) Any antidote to the technological constellation of thought must make a concerted effort to develop a richer anthropology than the anthropology of will.

According to Grant, such an anthropology must also have room for reverence, receptivity, and remembrance. In our society the non-manipulated has ceased to be valued

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[195] Grant, Technology and Empire, 133.

[196] Grant, "The Good or Values?" in The George Grant Reader, 392.

as good, and thus practices such as prayer and adoration seem meaningless while manipulation and material results are defined as meaningful. Modern rationalized pragmatism is based on this extensive account of freedom and withered account of law. What must be sought is the proper relation between spiritual freedom and boundaries which can give it form. If the intellect's only job is to secure the desires of the will, intellectual structure becomes meaningless, and a vacuousness about the lived life sets in. Grant turns to myth to reconnect meaning with limit.

> The heart of any myth is to tell us of that which our freedom does not create but by which it is judged… As modern people come to believe themselves to be the absolute source of themselves, all systems of order and meaning which appear to human beings as myth become other to them, and so in the very act of their sovereignty they experience the world as empty of meaning.[198]

Greek philosophy and Christian theology share a feature which combats the primacy of willing: reverence, a receptivity which must inform action. Reverence, which we learn from a tradition which is 'surrendered' to us, is the counterpoint to the hegemony of willing. But reverence, Grant concludes, cannot be a substitute for willing, lest we end up in complacency, so reverence must be a *contextualization* of willing.

6) A counter-case must explain how ontological order might be understood as beautiful and worthy of love, thus shaping our moral practice.

It is easily observable, Grant says, that technological practice has brought about both good and evil,[199] but this level of analysis distracts us from the reality that the modern world, in creating these technologies, has done so using a logic which denies ontological being its own uniqueness by leveling all things into generic quanta of energy. This leveling precludes our loving it as it presents itself but only as it becomes a useful extension of our will. Modern humanity therefore has no reason to respect the given (such

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[197] Grant, English Speaking Justice, 84.

[198] Grant, "The Good or Values?" in The George Grant Reader, 389.

[199] Grant, "Faith and the Multiversity," in Technology and Justice, 61.

as protecting endangered species) other than that it suits our desires, which might be renounced in favor of other interests at another time. This is a disjunction between truth and beauty at the heart of the modern project. Only when truth and beauty are seen together are we able to see the reality of the other, whether speaking in terms of material or social ontology. When truth and beauty are disjoined, the other inevitably collapses into projections of ourselves. What blocks our perception of the beauty of the other is not primarily an epistemic deficiency but a conceptual problem. We cannot 'experience' the primal truth and beauty of creation if we are not open to it, and our instrumental view of ontology systematically repudiates this openness.[200]

Our task then, Grant contends, is to reconnect the affirmation of creation as good with ontological order.[201] If we refuse to affirm that there is moral value in the structure of creation we deny its goodness, opening the door to the account of nature as indifferent and indeterminate "stuff".

7) Closedness to the other, born of our instrumental reason, must be renounced in favor of an understanding of ontology which relates it to justice. The search for a right understanding of ontology must not become abstract or disconnectedly metaphysical, but must be linked to questions about the meaning of justice.

Grant admits that his own view is heavily indebted to Plato's Republic, which strives to explain what is morally due to things and people. To *know* is to *love*, and therefore to give each thing its due. Christianity extends this account of justice by including what is due to individuals—forgiveness. If we understand justice in the Greek sense as rendering to things that which they are due, then decisions about concrete technologies are linked into a web of moral claims.[202]

Another way to say this is to point again to Heidegger's claim that we do not recover a right appreciation of material ontology without reference to social ontology. Grant holds that Heidegger was right—the solution to our technologically induced

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[200] Grant, "Faith and the Multiversity," in Technology and Justice, 51-52, 64-66.

[201] Grant, "Technology as Ontology," in The George Grant Reader, 429.

[202] Grant, "Faith and the Multiversity," in Technology and Justice, 54.

blindness is to return to a vision of reason which appreciates and listens to the ontologically given. Grant, however, thinks that Heidegger is wrong to say that we have lost touch with ontology, and contends that by speaking this way Heidegger masks the injustice of his own ontology. Heidegger renews our appreciation of the ontological, but loses Plato's sense that ontology must be one part of the search for social justice or proper social relations.[203]

Another way of saying that ontology must be the search for justice, Grant contends, is to say that we must have an account of otherness which can provide a boundary to our habit of using the other as a standing reserve. With abortion most obviously, but in many other facets of our social interaction, the ontological difference of the other is flattened out because their value is understood to reside in their fitting into my designs. Without a vision of true, ontological otherness as boundary we cannot love other humans or creation; we cannot even have "beauty in the eye of the beholder," for even a beholder must behold an other to be classed as a beholder. Neither the other in the present nor the other who speaks from the past through literature and religious tradition is available to scientific minds which stand above being and thought, objectifying it.[204] Our thought must continually return to concrete situations in which we wrestle through the practical implications of the desire to respect the inviolable claim of the other on our action.[205]

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[203] Grant, "Technology and Faith," in The George Grant Reader, 441. Various Heidegger interpreters have made this point: "Given that [for Heidegger] the essence of truth includes both mystery and errancy, the scandal is not that Heidegger skidded into Nazism; the scandal is that there was nothing in his thought or experience of *aletheia* to prevent it." William J. Richardson, "Heidegger and Politics" in Arleen B. Dallery, Charles E. Scott and P. Holly Roberts, eds., Ethics and Danger: Essays on Heidegger and Continental Thought (Albany: State University of New York Press, 1992), 18.

[204] Grant, Technology and Justice, 32, 38-39, 99. Grant rightly criticizes modern biblical scholars on this point.

[205] Grant, "Technology and Faith," in The George Grant Reader, 440-441.

8) Given this linkage of ontology and justice, a counter proposal must be set within an understanding of freedom which contends that the only unfettered freedom we have is to reject the beautiful and the good.

Grant denies the modern claim that to be human is to be the holder of the freedom to make ourselves and our world. Freedom is the possibility of loving the good which is given to us by God—and thus our only unbounded freedom is the freedom to turn away from this beauty.[206]

9) We must be careful to avoid imbalances of past Christian ethics which have made it impossible to construct the above counter position.

Grant points out first that to construct such a counter position demands that Christian moral theory not become static, complacent, or conservative due to an over focusing on the eternal or created component of moral truth. Such forms of moral theory tend to be too dismissive of the possibility of the amelioration of evil within history. On the other side, Christian moral theory must not allow human willing in abstraction from the created order. The goal is to think order and the attempt at progressive elimination of evil together. Christian moral deliberation which hopes to respond to the question of new technology cannot focus too heavily on law so that it kills human freedom and ingenuity, nor can it focus on freedom so that human ingenuity becomes unharnessed from the good order of creation. This means we must eschew the oft-caricatured polarities of an activist, will-based Protestant ethic or a law-based, non-eschatological Catholic morality.[207]

As can be expected, Grant was most worried about the dangers of Protestant voluntarism having taken up Max Weber's reading of technology as the product of Puritan piety. Specifically, he agrees with Weber's argument that medieval Catholic liturgy maintained a sense of rhythm and structure which worked with the rhythms of the body, while Calvinism in practice tended to espouse the teaching that men were responsible for reforming their bodies as they must subdue the natural world. Even more scathingly, he argues that Protestantism concentrated its focus when speaking of the

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[206] Grant, "Faith and the Multiversity," in Technology and Justice, 74-75.

[207] Grant, Philosophy in the Mass Age, 96-100, 117.

control of the passions on sexual lust and laziness, while emancipating the church from the traditional restraints on greed and the lust for mastery. The challenge of the North American untamed wilds further hardened this religiously-fueled vision to crystallize the core of modern technological man, which had no pre-modern traditions on which to look back to temper this willing.[208] Because North America remains largely Protestant in sensibility, Grant's analysis indicates that contemporary political theology must face a powerful current of activist thought and habit, which tends to swallow any more careful thinking as soon as a particular case of human suffering presents itself to be "solved", thus opening the floodgates of technology once again.

### *Conclusion: Limits, Creation and Hubris*

In searching for the conceptual heart of modernity Grant has gone some way in establishing the veracity of Heidegger's account of modern technology. He has demonstrated practical ways in which the core ideas of modernity make certain facets of material and social reality visible as they devalue others, and by reference to ancient thought has illustrated what is lost to moderns in the process.

Grant has also corroborated and substantially sharpened Heidegger's assertion that material ontology must guide human making in order to be good. They agree that our proper home is *discovered* not *created*. But he also shows how without this search being guided by a definition of justice, or fitting human action, attention to material ontology cannot satisfactorily guide human making because it claims attention to material order *is* justice. This insight is at times vitiated by Grant's use of the problematic formulation which asserts the "necessity of limits to man's making."[209] The search for "limits" fits well within the framework of an activist project, and if we are to develop a more central role for reverence it is important to stress its ability to develop sensitivities to once-hidden facets of the material order within which we exist. More importantly, as will be

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[208] Grant, "America: A New World," in The George Grant Reader, 401-404.

[209] Grant, Philosophy, 78.

argued in detail in chapter six, to search for "limits" is already to have turned away from moral deliberation as contemplation of the supreme good, God. I will argue that any theologically proper sense of moral boundaries is fundamentally focused on the giver and sustainer of all order.

Grant gets close to the meaning of this criticism in arguing that the problem of technology is that in living by its dictates we live without attention to the context of all human action, and this context is properly known only through the doctrine of creation. In his early work he weakens this insight by collapsing creation into eschatology with talk of continuous creation, but in his later work he gives us room to reverse this imbalance by asserting that the work of Christ is the criterion of all truth.[210]

In the final analysis, Grant is unable to construct a positive theological framework because he has pitted temporality and atemporality too firmly against one another. Grant applauds Aquinas' attempt to hold in tension the Greek view of an atemporal natural law with the biblical, Jewish God of history. In chapter six I contend that such attempts are pre-Christian in logic and thus theologically self-defeating. If Heidegger's God was entirely immanent (being equated with earth) then Grant's God is too alienated from time (being grounded in atemporality). Heidegger sets up a false redemption (as unity with the revealing of earth). Grant knows the right redeemer (the Christian God) but in the wrong form (complete transcendence).

What his discussion has drawn out is that creation is a given—the order of materiality *does* come to us as benefit to which all our action and making are beholden. He shows how this realization is related to theological beliefs, and how its rejection is both widespread and can be understood in terms of sin. He has indicated how this hubris of modernity might be questioned in order to begin to work through how it might be renounced. While Grant can tend to ontologize this hubris as the fate of the age,[211] the theological account of chapter six will indicate why we need not assume this.

In sum, Grant has supplied a promising but incomplete account of how Heidegger's thought might be shown to illumine the technological thinking and thus

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[210] O'Donovan, Twilight, 17, 42, 44.

[211] O'Donovan, Twilight, 171-172.

practice of modernity. Because Michel Foucault is more skeptical about the relation of thought to practice, he contends that to understand the modern way of life we must look beyond our explicit thoughts to the unthought logic of our practices.

# Chapter Three: Michel Foucault and the Practices of Technology

He was useful because he had been instructed…

Joseph Conrad[212]

## *The Turn from the Ideal to the Empirical Perspective*

If Grant's study of Heidegger's thought has developed a clearer picture of the importance of explicit knowledge frameworks for all our action and perceiving, Foucault pursues a similar course to establish that human knowing and acting is also deeply shaped in less explicit and therefore less accessible ways by our practical life. He gives added depth to Heidegger's explication of the way of being of our ten men by illustrating how deeply their explicit language and thought are bound up with wider logics of practice to which each actor has little or no direct access. In the last chapter we were concerned with the distribution of ideas in conceptual space, and attempted to link changes in the distribution of ideas with changes in the behaviors of bodies in real space. Now we reverse this procedure, concerning ourselves with the activity of bodies in real space, working backward to make explicit the hidden patterns imbedded in their movements.

Such embedded bodily knowledge has come to play an important part in modern political life. "For Heidegger, the technological understanding of beings attempts to make entities wholly present as standing reserve," whereas one commentator notes, "For Foucault, the technological system attempts to make humans wholly present as bio-power."[213] Grant's analysis, with its idealist cast, assumed but did not analyze this inexplicit level of human practical and physical knowledge. Foucault exposes the central role such knowledge plays in sustaining political life. Modern political power is novel, he says, in its explicitly technological method of training physical habits to expedite social

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[212] Joseph Conrad, Heart of Darkness (London: David Campbell Publishers Ltd., 1993), 51.

[213] Zimmerman, Heidegger's Confrontation, 203.

functioning. The upshot is that we moderns willingly, but without explicitly realizing it, participate in regimens which treat us and others as raw material to be reformed by political technique. Arnold Pacey and David Nye contend that this point can be sharpened in relation to manufacture by establishing that technological practice (the making of artifacts) relies on a whole range of subconscious aesthetic senses, which, again, are easily manipulated by political techniques to make the implementation of new technologies "feel"—subjectively—good, therefore undermining any serious impulse to moral examination of the propriety of new technologies. This chapter concludes that on a "bottom-up" examination, Heidegger's theory is again vindicated. Analysis of our practices makes it clear that no matter what we *explicitly* claim and affirm, our practices uphold and augment a political mechanism which has all the hallmarks of treating humanity as standing reserve which must be rationally developed and deployed in the struggle of nation against nation and corporation against corporation. It is my contention that the habits of Western citizenship have a direct bearing on how we approach a wide range of practical problems, especially problems of interpersonal and political relations. Before moving to the body of the chapter, three preliminary remarks are in order.

## *Situating Foucault's Analysis*

### Diagnosing the Present: The Methods of Grant and Foucault

Like Grant, Foucault attempts to read the present with the help of several Heideggerian tools. What Foucault learned from Heidegger is best summarized by Ludwig Wittgenstein's comment that, "Hegel seems to me to be always wanting to say that things which look different are really the same. Whereas my interest is in showing that things which look the same are really different."[214] If Grant's project is to trace a

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[214] Quoted in David J. Gouwens, Kierkegaard as Religious Thinker (Cambridge: Cambridge University Press, 1996), 18. Gouwens notes Wittgenstein's profound respect for Kierkegaard, and the similarity of their sentiments on this point. On Foucault's discovery of Nietzsche through Heidegger, see Hubert Dreyfus and Harrison Hall, "Introduction," in Heidegger: a Critical Reader, 1.

continuity in the penetration of technological thinking into every facet of human thought, Foucault focuses on differences in historical practice, providing a necessary hedge against constructing an "ascent" genealogy of technology: "I think we should have the modesty to say to ourselves that, on the one hand, the time we live in is not *the* unique or fundamental or irruptive point in history…It is a time like any other, or rather, a time that is never quite like any other."[215] Foucault's warning is a reminder that we need not rest an analysis of the current hegemony of the technological on a projection about whether the past expansion of the technological mindset will continue or decline. I agree that Heidegger and Grant have rightly traced a historical expansion of mathematical logic to create the world we know, but the important point is to trace how historical trends have brought us to the present, and to establish that this present may indeed be described as one in which the predominant mode of behavior augments human power by way of technological logic.

Foucault's focus on the logic of present practices means he does not analyze ideas or language games. Comparisons of present practices to those of the past reveal the peculiarity of contemporary social embedding. Such an inquiry, he hastens to add, is not deconstruction, but "a movement of critical analysis in which one tries to see how the different solutions to a problem have been constructed; but also how these different solutions result from a specific form of problematization."[216]

From Foucault's perspective, Grant's methodical attempt to "enucleate" the thought of the present is of limited value, for our thought is molded more completely than we mold the thought of our age. Both Grant and Foucault would repudiate the critical method of the other, each claiming that one cannot take up both perspectives

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[215] Michel Foucault, "Structuralism and Post-structuralism," in Michel Foucault, The Essential Works of Michel Foucault, 1954-1984, vol. 2, Aesthetics, Method, and Epistemology, ed. James D. Faubion, trans. Robert Hurley et al. (London: Allen Lane, The Penguin Press, 1998), 449.

[216] Michel Foucault, "Polemics, Politics, and Problematizations," in The Essential Works of Michel Foucault, 1954-1984, vol. 1, Ethics, Subjectivity and Truth, ed. Paul Rabinow, trans. Robert Hurley et al. (London: Allen Lane, The Penguin Press, 1997), 118-119.

simultaneously.[217] Yet both build on the thought of Heidegger in which the two perspectives stand unified. Given the merits of Heidegger's interweaving of the two perspectives, it seems fair to temper the counter-polemics of Grant and Foucault, while admitting their claims to absolute exclusivity are correct to the extent that one cannot "mix" the two levels of analysis into a composite view which denies each analysis its warranted uniqueness. Having affirmed the Heideggerian symbiotic dialectic of thought and practice, I also contend that there is a heuristic value in Grant's attempt to trace how explicit thought maintains and marks our action, while agreeing with Foucault that the logic of our practices is indeed a more basic form of knowledge, yet not one which invalidates all transcendent thinking. In practice the two levels are constantly in interplay. But the radically different starting points of Grant and Foucault allow a sharpening of this study by providing distinct angles from which to study contemporary technological society.

## Problematization

Foucault's term 'problematization' lies at the heart of our interest in his project of describing, identifying, and explaining the thought forms and practices which cause certain problems to appear as problems. Ethics, for Foucault, (insofar as there is an ethical task) begins with a decision about present dangers, and may be followed by a speech act which reveals that the "problems" which constrain our choices into dangerous channels may be illusory. Perceived obstacles, Foucault claims, are not necessarily to be taken at face value, but rather present the opportunity to examine the broad trajectories of thought and action which have "produced" the obstacle *as* obstacle. Such examination wrests from the experience of dilemma greater knowledge of our present beliefs.[218] The ethical task then is "to show that things are not as self-evident as one believed, to see that what is

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[217] Foucault, "Nietzsche, Genealogy, History," in Aesthetics, 385-387.

[218] Foucault, "On the Genealogy of Ethics," in Ethics, 256-257.

accepted as self-evident will no longer be accepted as such. Practicing criticism is a matter of making facile gestures difficult."[219]

Technology is never the central focus of Foucault's analysis, but his notion of problematization explains why study of the social perplexity surrounding moral deliberation about new technologies may be uniquely productive, because representing a rare opportunity for free thought.[220] "[F]or a domain of action, a behavior, to enter the field of thought, it is necessary for a certain number of factors to have made it uncertain, to have made it lose its familiarity, or to have provoked a certain number of difficulties around it."[221] Once thought has detached from practice we are freed to reflect on how a paired set of problems and solutions given to us in our social context are incomplete or contradictory and in need of reformulation. This focus on problems constitutes a central orienting framework for the ethical method of Part II.

We can summarize Foucault's method by saying that he is attempting to make our 'world' (in Heideggerian terms) appear visibly before us. Foucault's thought regularly returns to examine 'constructed' worlds, those politically and ideologically saturated spaces, such as the American Puritan city or,

> …those extraordinary colonies of Jesuits that were founded in south America: marvelous, absolutely regulated colonies in which human perfection was effectively achieved. The Jesuits of Paraguay established colonies in which existence was regulated in every particular. The village was laid out according to a strict arrangement around a rectangular plaza with a church at the far end; on one side the secondary school, on the other the cemetery, and then opposite the church,

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[219] Quoted in John Caputo and Mark Yount, eds., "Institutions, Normalization, and Power," in Foucault and the Critique of Institutions (University Park, Penn.: The Pennsylvania University Press, 1993), 9. Whether Foucault's descriptive project can sustain the ethical claims made here will be the subject of this chapter's concluding analysis of his thought.

[220] Here Foucault explicitly follows Heidegger. Commenting on paragraph 69 of Being and Time, Michael Gelven notes that this is why Heidegger focuses on the question of damaged equipment, which is no longer transparent in its functioning. We can use a hammer, or reflect on its purpose, but the reflective mode is derivative of the mode of using. See Gelven, A Commentary, 198, 199.

[221] Foucault, "Polemics, Politics, and Problematizations," in Ethics, 117.

there began an avenue that a second avenue intersected at a right angle. The families each had their little hut along these two axes, and in this way the sign of Christ was exactly reproduced...The daily life of individuals was regulated not with the whistle, but with the bell. Reveille was set for everybody at the same hour and work began for everybody at the same hour; meals were at noon and five o'clock then one went to bed, and at midnight there was something called the conjugal wakeup, meaning that when the convent bell rang, everybody did his duty.[222]

The Jesuit colony and the ship (a space organized for empire building and commercial gain) are pure types which help us to understand that the organization of the space we inhabit is patterned, quite often to some purpose. By analyzing the practical obstacles thrown up for us by life in our historically particular environment, the priorities we too have been born into can slowly come into focus.

***Punishment and the Disciplinary Society: From Drama to Docility***

Discipline and Punish presents the results of some of Foucault's closest archeological investigation, in which he is specifically trying to understand how power relations manipulate knowledge to create certain types of agents.[223] For our purposes it will be important to draw out the development of logic grounding the multitude of discontinuities which Foucault will examine in his quest to understand the modern technology of power. Foucault will show that this logic is focused on efficiency and rationalized control, the hallmarks of the technological method. More importantly, he also shows how these technological priorities are not simply the priorities of political governors, but are our priorities as well.

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[222] Foucault, "Different Spaces," in Aesthetics, 184.

[223] Hubert Dreyfus and Paul Rabinow thoroughly examine the phases of Foucault's thought and indicate the importance of this mature synthesis in Hubert L. Dreyfus and Paul Rabinow, Michel Foucault: Beyond Structuralism and Hermeneutics, with an afterward by Michel Foucault (New York: Harvester Press, Ltd., 1982).

Foucault's examination of modern political practice begins with an observation about a great shift in western penal practice, and goes on to show how this change in the practice of punishment marked a change in the practices of society as a whole, as indicated by the growth of specific new modes of social and political practice. Foucault brings before us a nearly-forgotten world with this startling quotation from a French court judgment:

> On 2 March 1757 Damiens the regicide was condemned to 'make the *amende honorable* before the main door of the Church of Paris', where he was to be 'taken and conveyed in a cart, wearing nothing but a shirt, holding a torch of burning wax weighing two pounds'; then, 'in the said cart, to the Place de Greve, where, on a scaffold that will be erected there, the flesh will be torn from his breasts, arms, thighs and calves with red-hot pincers, his right hand, holding the knife with which he committed the said parricide, burnt with sulphur, and, on those places where the flesh will be torn away, poured molten lead, boiling oil, burning resin, wax and sulphur melted together and then his body drawn and quartered by four horses and his limbs consumed by fire, reduced to ashes and his ashes thrown to the winds'.[224]

In this not-so-distant European world, political power is sustained by rituals which are public and visual, based on the codified violence of punishment.

Only fifty years later, and in stark contrast, would-be penal reformer Jeremy Bentham expressed the essence of the modern punishment regime. Gone was the destruction of the criminal, and in its place Bentham called for a "mill for grinding rogues honest, and idle men industrious."[225] Such a prison would operate with clockwork

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[224] Michel Foucault, Discipline and Punish: The Birth of the Prison, trans. Alan Sheridan (New York: Vintage Books, 1995), 3.

[225] Janet Semple, Bentham's Prison: A Study of the Panopticon Penitentiary (Oxford: Clarendon Press, 1993), 107. Semple's excellent examination of Bentham's life and the intellectual history of the Panopticon on the whole confirms Foucault's reading of Bentham's Panopticon. She emphasizes more strongly than does Foucault that the Panopticon ought to be understood as the hermeneutic key linking Bentham's biography and philosophy, but dislikes (for no given reason) "revisionist historian" Foucault implying that the Panopticon exemplifies important facets of modern political practice (152).

regularity through ingenious systems of observation and communication (hence *pan opticon*) designed to keep prisoners separate from warders while maintaining visual contact so that "a keeper never need see a prisoner without either a wall, or a grating, or a space of seven feet between them."[226] The emblem Bentham chose to represent such a prison was the ever open eye, ringed by the words "Mercy, Justice, Vigilance."[227] Such a machine had potential not only for the reform of prisoners, the aged Bentham recalled, but was "a magnificent instrument with which I then dreamed of revolutionizing the world."[228] The Panopticon was "A new mode of obtaining power of mind over mind, in a quantity hitherto without example."[229] Though Bentham was never to build his beloved Panoptical prison, Foucault argues that in it he laid bare the essence of modern political technique.

## The Sword, the Pageant and Premodern Political Technique

To grasp the novelty of modern forms of political practice requires a close examination of premodern forms as exemplified in the torture and execution of Damiens the regicide. What political techniques are at work here? In the premodern era, Foucault contends, torture and public punishment were intended to reveal truth while simultaneously serving as a public ritual maintaining the fabric of the political economy. Torture was part of a legal method which did not follow the binary guilty/innocent scheme with which we are familiar, but an admixture method which assumed that there were degrees of guilt, and thus degrees of punishment. Thus torture was simultaneously a method of investigation and a punishment. Even the execution itself was part of the

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[226] Semple, Bentham's Prison, 119.

[227] Semple, Bentham's Prison, 143.

[228] Semple, Bentham's Prison, 288.

[229] Semple, Bentham's Prison, 301.

investigation as the crowds who watched tried to ascertain in the manner of the condemned's death whether they were guilty or innocent.[230]

It was this final public moment of punishment which constituted the chief political inefficiency of the old political technique, susceptible as it was to a reversal which exposed the government as having condemned an innocent person. If the condemned did not recant, this undermined the state's authority in the eyes of the populace. More efficient penal practices were needed which were not susceptible to this reversal, yet any reform would attack a whole environment of social beliefs and institutions. Public punishment fits within a system of production in which labor power, and thus the human body, had neither utility nor commercial value conferred upon it by an industrial economy. Centuries of the practice of Christianity had tended to create a widespread sense that the body was instrumental for the health of the soul, to be mortified for the soul's good. Thus the extravagance of the destruction of the body of the criminal was comprehensible in several frameworks as the proper means of upholding social order in pre-modern society. Torture was a similarly coherent legal practice in that the power of the sovereign was imbedded in bodies to reveal truth and uphold the right of the sovereign over bodies. The horror of the sovereign's violent punishment annulled the horror of the crime, the body of the accused being the site of the rightful vengeance of the sovereign upon wrongdoing.[231]

Thus did crime and punishment fit together in a coherent whole, Foucault continues. The violence of execution negated a crime against the people, a cauterization undertaken by the sovereign responsible for protecting the body politic. In turn, the sovereign maintained by punishment an expectation in the populace of a certain wrathful vengeance upon any violator of the social union. Governmental power was charged with pursuing war and maintaining social order; it was a power based on personal bonds, whose breaches called for a wrathful vengeance; a power in which crime was rebellion,

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[230] Foucault, Discipline and Punish, 34, 42, 46.

[231] Foucault, Discipline and Punish, 54-55, 61-63.

potentially the first act of civil war against rightful sovereignty; in sum, this was the power of the sword recharged and maintained in ritualized, public shows of violence.[232]

Discipline, Training and Modern Political Technique

The advent of the Enlightenment heralded a new vision of humanity, Foucault notes. A limit was proclaimed to punishment; the reformers wanted a correlation of the measure of punishment with a heretofore unknown quality, a prisoner's "humanity," which came in time to be seen as a resource to be corrected and transformed and returned again to circulation. Historical records show that this conceptual shift was preceded by much more mundane adjustments to penal policy. The end of the eighteenth century, parallel to the rise of industrial production, saw the emergence of a more finely tuned penal practice with a greater intolerance for economic offenses but a higher threshold of punishment for violent crime. At the same time smaller penal interventions appeared more quickly, more regularly and for more petty offenses. Thus it appears that the prison reformers' criticism had at least two motives: the protection of the prisoner against the cruelty of those wielding political power, and a critique of a poor economy of political power which was ineffective at stopping the types of crimes that were important to curtail in an early industrial society. Behind calls for reform lay a political need to punish more universally and more deeply within the social body. Calls for "humanity" on the practice of punishment, Foucault notes, retooled the way power interacted with the social body, limiting a wasteful form of punishment by reformulating it in a configuration more efficient at controlling the movements of bodies.[233]

Observing the intermediate stages of early modern punishment also helps to clarify the current shape of modern punishment. While Enlightenment penal reformers fully accepted the maxim of pre-modern punishment, that punishment should fit as closely as possible to the crime, they rejected its premodern interpretation; the removal of

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[232] Foucault, Discipline and Punish, 57.

[233] Foucault, Discipline and Punish, 74-75, 78-82, 92.

the liar's tongue, the sluggard being put to labor, the poisoner being boiled alive; the whole educative theater of punishment. They likewise reversed the presumption of pre-modern political economy that the prison was an arbitrary and therefore disreputable tool of the king or prince who could imprison without trial and for any duration he chose.[234] Foucault asks, "How then could detention, so evidently bound up with an illegality that was denounced even in the power of the prince, become in so short a time one of the most general forms of legal punishment?"[235]

Foucault detects several strands of theory coalescing in the newly solidified preference for penitentiary punishment. In premodern punishment, the act of punishment was conceived in metaphysical terms, as a destruction of evil, a purging, which was intended to educate the political body, and as also having a pedagogical function, to uphold the political economy. With the birth of the great colonial experiments came deportation, which combined an economic rationale with the metaphysical expungment of evil. But as the industrial age came to full force the new logic of industrial power pressed in on punishment, in which maximizing the trained work force is all important. These shifting pressures on the political task of punishment help to begin to explain how the mode of western penality has been effected by larger trends in political economy.

By the late eighteenth century these wider social dynamics had come to be expressed in the form of the modern penitentiary, which focused on the prevention of future crime and thus the project of retraining the criminal, Foucault observes. Penalty had been detached from the crime and reattached to the factors considered to indicate threat of recidivism in the criminal. From punishment as a public sign of the cleansing of the social body comes the repeated reforming exercises of the prisoner, made up of time tables, compulsory movements, regular activities, solitary meditation. This regimen sought to restore the obedient subject who accepts the habits, rules and orders of the power exercised continually around him and in him.[236] The old form of power, Foucault notes, uses, "the ritual marks of the vengeance that it applies to the body of the

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[234] Foucault, Discipline and Punish, 116-119.

[235] Foucault, Discipline and Punish, 120.

[236] Foucault, Discipline and Punish, 126.

condemned man; and it deploys before the eyes of the spectators an effect of terror as intense as it is discontinuous, irregular and always above its own laws, the physical presence of the sovereign and of his power. The reforming jurists, on the other hand saw punishment as a procedure for requalifying individuals as subjects, as juridical subjects…it operated methods of training the body—not signs—by the traces it leaves, in the form of habits, in behavior."[237]

Foucault sees Jeremy Bentham's Panopticon as the perfect architectural embodiment of modern methods of disciplining order. The Panopticon is a circular building, comprised in its outer wall by vertical rows of cells, each back lit, containing an occupant, and open to the center where an unobservable observer oversees all. Such a system reverses the principle of the dungeon confinement, using light instead of darkness and substituting visibility for hiddenness. The observed become invisible to one another but visible to their supervisors. The effect of such an enclosure is immediate and profound: those watched over feel the effects of power etched into their consciousness as long as they are within its gaze, whether this power is actually exercised or not. To make this internalization of the gaze of power most effective, Bentham laid down the principle that power should be visible at all times, but unverifiable. In the Panopticon, the central observation tower must always be visible, but those watched over must never know if the observation tower is occupied.[238] The architecture is a technology for imprinting power into the subconscious. "It is an important mechanism, for it automatizes and disindividualizes power," Foucault comments. "Power has its principle not so much in a person as in a certain concerted distribution of bodies, surfaces, lights, gazes; in an arrangement whose internal mechanisms produce the relation in which individuals are caught up."[239] Such an efficient tool for the control of bodies creates a homogenous field of supervision which is silent and permanent, making physical restraint unnecessary as

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[237] Foucault, Discipline and Punish, 130-131.

[238] Foucault, Discipline and Punish, 200.

[239] Foucault, Discipline and Punish, 202. Foucault's conceptual point is also intended as a jab at ongoing Communist political repression.

light and openness become the tools of restraint. Overseers can calmly undertake the task of classification and examination of progress, or calculating wages, or assessing health.

Here, Foucault notes, is a secularized parody of the Christian insight that God sees all things, which has long attuned the Christian conscience to the importance of detail. Modern political economics seized on and applied this emphasis as a technical program: all details can be understood, tapped, and used to mold the whole. Napoleon understood this principle with striking clarity, wishing "to arrange around him a mechanism of power that would enable him to see the smallest event that occurred in the state he governed; he intended, by means of the rigorous discipline that he imposed, 'to embrace the whole of this vast machine without the slightest detail escaping his attention.'"[240]

Napoleon was well aware that this new technology of political power was applicable right across society. Any increase in the ability to oversee could be teamed with a disciplinary regime which aimed to homogenize and thus more efficiently order those overseen. Foucault understands the peculiarly modern form of this visual and normalizing political economy to have five distinctive marks. First, its penal mechanism is one of small disincentives which are established in connection with innumerable minor infractions, and aims to make all deviations subject to a web of minor repercussions. Second, a focus on non-observance is characteristic of this new disciplinary penality. Offenses are no longer only rule breaking behaviors, but also, and more often, offenses are committed by not reaching a required level of proficiency or production. Third, punishments are corrective exercises making punishments isomorphic with obligations. Punishment for poor writing or shooting will be more writing and shooting exercises. Fourth, the disciplinary stick operates in tandem with the carrot, transposing the medieval concept of the indulgence to allow rewards for good behavior to cancel out penal micro-debts. Finally, rank becomes a simple mechanism of reward or punishment by which "good" subjects are rewarded and "bad" assessed with precision and punished by successive micro-demotions.[241] Thus, Foucault says, "The perpetual penality that traverses all points and supervises every instant in the disciplinary institutions compares,

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[240] Foucault, Discipline and Punish, 141.

[241] Foucault, Discipline and Punish, 177-181.

differentiates, hiearchicalizes, homogenizes, excludes. In short, it *normalizes*."[242] Such a radically normalizing procedure is perfectly compatible with a high formal valuation of both equality and difference, "since within a homogeneity that is the rule, the norm introduces, as a useful imperative and as a result of measurement, all the shading of individual differences."[243]

The heart of this visibility-penality structure is the examination, the point at which normalizing judgment and observing hierarchy are united. In the course of the eighteenth century we see the hospital and school, for instance, transformed by ever more regular and codified systems of examinations. Tracking and supervision of patients and students is greatly enhanced by formalized charting and grading methods. The repetition of physician examination sees a sharp rise in this period. In 1681, in Paris, doctors made single daily visits only to seriously sick patients, but by the eighteenth century regulations stipulated a minimum of two hours of examination a day, "even Easter Sunday." By 1771 a resident physician was appointed to be on hand day and night, and to make regular rounds. In this way,

> The old form of inspection, irregular and rapid, was transformed into a regular observation that placed the patient in a situation of almost perpetual examination. This had two consequences: in the internal hierarchy, the physician, hitherto an external element, begins to gain over the religious staff and to regulate them to a clearly specified, but subordinate role in the technique of the examination; the category of the 'nurse' then appears; while the hospital itself, which was once little more than a poorhouse, was to become a place of training and of the correlation of knowledge; it represented a reversal therefore of the power relations and the constitution of a corpus of knowledge. The 'well-disciplined' hospital became the physical counterpart of the medical 'discipline'; this discipline could now abandon its textual character and take its references not so much from the tradition of author-authorities as from a domain of objects perpetually offered for examination.[244]

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[242] Foucault, Discipline and Punish, 183.

[243] Foucault, Discipline and Punish, 184.

[244] Foucault, Discipline and Punish, 186.

Whereas once the political economy was grounded in the power to expose subjects, either to public punishment or public honor, with the examination power is exercised behind the scenes, in an invisible selection process which at the same time imposes on all its subjects an intimate and compulsory visibility. Thus the examination for the first time introduces individuality into the field of surveillance: an archive is constructed by using a network of documents to capture and fix the individual. It answers the problem of armies, where deserters had to be tracked, dead noted, and the services and values of individuals known; of hospitals, where patients must be recognized, the evolution of their diseases and effectiveness of their treatments marked, and epidemics noted; and of schools, where aptitudes had to be defined, and progress tracked.

A third change created by the addition of the examination to the regular operation of power is made visible by a change in nomenclature. The "case" is no longer, as in law, the circumstances defining an act and capable of modifying the application of a rule, but is a single individual conceived as the referent of a physical archive of knowledge. This is a stark change with broad import. Politically, the examination is the creation of the individual, a project of power to develop a catalog of the individual's salient features to constitute them as a "case". This is a portentous reversal of individualization. In the past,

The more one possesses power or privilege, the more one is marked as an individual, by rituals, written accounts or visual reproductions. The 'name' and the genealogy that situate one within a kinship group, the performance of deeds that demonstrate superior strength and which are immortalized in literary accounts, the ceremonies that mark the power relations in their very ordering, the monuments or donations that bring survival after death, the ostentation and excess of expenditure, the multiple, intersecting links of suzerainty, all these are procedures of an 'ascending' individualization. In a disciplinary regime, on the other hand, individualization is 'descending': as power becomes more anonymous and more functional, those on whom it is exercised tend to be more strongly individualized; it is exercised by surveillance rather than ceremonies, by observation rather than commemorative accounts, by comparative measures that

have the 'norm' as a reference rather than genealogies giving ancestors as points of reference; by 'gaps' rather than by deeds.[245]

This great reversal has profound implications for how we describe the action of political power upon the masses.

We must cease once and for all to describe the efforts of power in negative terms: it 'excludes', it 'represses', it 'censors', it 'abstracts', it 'masks', it 'conceals'. In fact, power produces; it produces reality; it produces domains of objects and rituals of truth. The individual and the knowledge that may be gained of him belong to this production.[246]

According to Foucault, the shift in punishment technique from visual ritual to systematic retraining assumed a general shift in how bodies themselves were conceived. Take the soldier: until the early seventeenth century it was thought that one could recognize a bodily rhetoric of honor in the soldier before he joined the army. Born soldiers were those who exhibited natural strength, courage and an honorable bearing. But by the late eighteenth century, military training treated the soldier as built up from formless clay. The "machine required can be constructed; posture is gradually corrected; a calculated constraint runs slowly through each part of the body, mastering it, making it pliable, ready at all times, turning silently into the automatism of habit; in short, one has 'got rid of the peasant' and given him 'the air of a soldier'."[247]

This great shift to man-as-machine was constructed simultaneously on two registers, Foucault argues. On the anatomico-metaphysical register, the level of intelligibility, Descartes described the individual as a machine-like being whose true reality was the thinking mind. On the technico-political register, which is concerned with the politically useful body, we see the proliferation of codified regulations and methods for building up a disciplined army, school, and hospital, each designed to control and

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[245] Foucault, Discipline and Punish, 192-193.

[246] Foucault, Discipline and Punish, 194. Heidegger's definition of truth as a balance of revealing and concealing is evident here.

correct the operations of the bodies so segmented from minds. Where once the body was assumed to be most useful to power by drawing out its own character, now power works by assuming that its preferred subject has first to be made physically blank and docile, in order to be re-formed with efficient and scientific methods.[248] The task of government has always been to control and oblige individual bodies in order to govern the body politic, but in the eighteenth century this control assumes a new form, no longer commanding a whole entity but breaking it down to reform it. It focuses less on the symbolic, or the retraining of thought, and more on the efficiency of their movements. And in doing so it becomes more persistent, more constant and measured, making ever more spatial, temporal and dynamic demands on the subject. "These methods, which make possible the meticulous control of the operations of the body, which assured the constant subjection of its forces and imposed upon them a relation of docility-utility, might be called 'disciplines'."[249]

The effect of these new disciplines was to increase the force of individual bodies by training them to work in groups to accomplish specific tasks. Through such training the force developed in each body becomes of diminished use to the individual but of heightened use to power because the skills by which power is increased are riddled with necessary interpenetration by command and information-gathering structures. This, Foucault argues, is the paradox of modern power: more of it is harnessed by a deeper penetration and tapping of human energies, but at the cost of these new powers being unavailable to the individual. Updating Marx's comment that economic exploitation separates labor from its product, Foucault argues that modern political economy provides new aptitudes while exacting new dominations.[250]

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[247] Foucault, Discipline and Punish, 135.

[248] Foucault, Discipline and Punish, 136.

[249] Foucault, Discipline and Punish, 136-137. Foucault does not explicitly make the important implied point that the Enlightenment's construction of humanity as the thinking being cleared the way for this remaking of bodies by severing cognitive from bodily definitions of freedom.

[250] Foucault, Discipline and Punish, 138.

Bentham's Panopticon, the architecture of perfect surveillance, may have been built only a few times,[251] but it is hardly a footnote in the genesis of modern political life as it perfectly represents the logic of modern political life embodied in a pure architectural and optical system.

It's a case of 'it's easy once you've thought of it' in the political sphere. It can in fact be integrated into any function (education, medical treatment, production, punishment); it can increase the effect of this function, by being linked closely with it; it can constitute a mixed mechanism in which relations of power (and of knowledge) may be precisely adjusted, in the smallest detail, to the processes that are to be supervised; it can establish a direct proportion between 'surplus power' and 'surplus production'. In short, it arranges things in such a way that the exercise of power is not added on from the outside, like a rigid, heavy constraint, to the functions it invests, but is so subtly present in them as to increase their efficiency by itself increasing its own points of contact.[252]

The Training of all Society

Foucault contends that the modern, moldable human sprang to life in the areas where human government was taxed the greatest, in waging war or fighting epidemic.[253] But the simple techniques developed in these theaters came to be applied to the governance of all society, within the space of a century and a half growing from extraordinary measures for the combat of deadly disease and war into a regular feature of the everyday life of modern humanity. The shift in political model, from one in which exclusion or excision of the contagion was the basic political conceptuality to another in

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[251] At least one stands in London, the Cruciform Hospital in Gower Street, designed by Bentham himself, but the panoptical prison is alive and well as evidenced by a newly built plexiglass and steel example in the industrial backwater of my home town, Baytown, Texas.

[252] Foucault, Discipline and Punish, 206.

[253] These are extreme social situations in which the use of extreme methods of political organization *might* conceivably be defended. What is essential is recognizing when and how the extraordinary becomes a norm.

which the disordered is organized in order to strengthen the social forces, parallels a shift in the practices of governing now understood to serve the increasing of production, "to develop the economy, spread education, raise the level of public morality; to increase and multiply."[254] Foucault thus supplies the historical connection necessary to make sense of the rapid application of the disciplines to many social spheres from the beginning of the nineteenth century: asylum, penitentiary, reformatory, school, and hospital.[255] In this way the panoptic arrangement provided the formula for a more general aim: the society "penetrated through and through with disciplinary mechanisms."[256]

Foucault understands this disciplining of society to have been built on four simple innovations. First, space was enclosed within a physical partition to increase the ability of one person to take responsibility for the goings on within it. The barracks, hospital, and factory were explicitly compared to the monastery where gates control access to concentrate work forces on a single task. Second, this space was divided analytically, so that the bodies and elements within it could be distributed in a logical way, curtailing uncontrolled circulation and conglomeration of bodies, and tying them to spots so that they can be watched, known and trained. Third, this divided space is organized according to a functional schema, so that each person has a task (as in a factory) or a screen can be set up to divide different categories of people (as in a hospital where contagion must be isolated). Finally, within this horizontal and spatial organization, a vertical and ideal scale is set up of rank, a system of hierarchical command relations. This hierarchical system begins at school with grades and examinations which sort students by aptitude and success, setting them in a competition with their peers which produces maximum effort from each student. A perpetual movement up and down the grade hierarchy functions both to motivate students and to give the teacher information on how to intervene most effectively to guide the whole and the individual.[257] In sum,

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[254] Foucault, Discipline and Punish, 207-208.

[255] Foucault, Discipline and Punish, 198-199.

[256] Foucault, Discipline and Punish, 209.

[257] Foucault, Discipline and Punish, 141-148.

In organizing 'cells', 'places', and 'ranks', the disciplines create complex spaces that are at once architectural, functional and hierarchical...They are mixed spaces: real because they govern the disposition of buildings, rooms, furniture, but also ideal, because they are projected over this arrangement of characterizations, assessments, hierarchies. The first of the great operations of discipline is, therefore, the constitution of '*tableaux vivants*', which transform the confused, useless or dangerous multitudes into ordered multiplicities.[258]

Once bodies are thus organized in space, Foucault points to five further mechanisms which remake the functioning of the individual body. First, time is subdivided into quarter hours, minutes, then seconds. Movements within armies, schools, and factory became amenable to greater intervention by this compartmentalization of time, and now performances during this time can be expected to be free of defects—time measured and paid must not be spent frivolously, but must be used precisely and diligently.

Second, each body's responsibilities are elaborated within this subdivided time. Whereas soldiers once had to walk in step, now the disciplines divide this undifferentiated step to institute the one-second length regular step, and the half-second double time. During this time each body part will be stringently accounted for by temporal imperatives. Acts are broken into elements, and each element, or body part, is assigned a task whose order of succession is prescribed.

Third, the body is correlated to a certain productive gesture. In the correct use of the body, which makes possible the correct use of time, nothing must remain idle or useless, and a well disciplined body is focused on the slightest gesture. Good handwriting, for example, depends on the erect body, slightly turned seating, elbow on the table, each finger the correct distance from the table, etc.

Fourth, the body and the object of production are synchronized. Foucault relates a 1766 description of the training of the soldier to hold a rifle; right hand grasping butt, trigger guard resting on first finger, left hand at notch with thumb back against molding; an almost endless litany of precise commands. A coding is created as individual body

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[258] Foucault, Discipline and Punish, 148.

parts are carefully keyed to the parts of the object to be manipulated. These static instructions are then woven into a maneuver by a precise sequencing of each body-object connection into another succession of explicit and obligatory dynamic prescriptions. In this way a body-machine complex is created, a politically efficient synthesis of body and machine.

Fifth, the principle of exhaustive use is developed. The time table no longer simply assures the worker's presence at work, but is now used to set up a positive economy. Tables are used to ensure more operations are completed in the same time, and thus more power is extracted from the body. The more time is divided and the body's operations broken down, the greater the possibility for the manager to control exhaustion in relation to the goal of maximum speed and efficiency.[259]

Over the course of the eighteenth century, Foucault observes, the techniques of arranging such trained bodies in relation to one another were again sharpened, emerging first in the military but also in schools. These methods were based on the discovery that these new humans were most powerfully combined when thought of as interchangeable units as regards their spatial, temporal and force characteristics. Maximization of collective output depends on a homogenous workforce in which generic rather than individual qualities are the unit of measure. In this way the individual can be fitted within a multi-segmentary, machine-like organization. Here individual particularity is valued only in relation to skill levels which can be arranged in chronological series. Finally, these carefully measured combinations of individual generic bodies must be precisely attuned to simple commands and must respond immediately when these commands are given. These simple but profound organizational reconceptualizations make it possible to place bodies within a coded web of simple signals to which they have single, obligatory responses.[260]

It has been said, notes Foucault, that war is a continuation of politics by other means. But it is also true that politics, as a technique of internal peace and order,

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[259] Foucault, Discipline and Punish, 149-155.

[260] Foucault, Discipline and Punish, 164-166.

...sought to implement the mechanism of the perfect army, of the disciplined mass, of the docile, useful troop, of the regiment in camp and in the field, on maneuvers and on exercises... The classical age saw the birth of the great political and military strategy by which nations confronted each other's economic and demographic forces; but it also saw the birth of meticulous military and political tactics by which the control of bodies and individual forces was exercised within states... Historians of ideas usually attribute the dream of a perfect society to the philosophers and jurists of the eighteenth century; but there was also a military dream of society; its fundamental reference was not to the state of nature, but to the meticulously subordinated cogs of a machine, not to the primal social contract, but to permanent coercions, not to fundamental rights, but to indefinitely progressive forms of training, not to the general will but to automatic docility.[261]

Having outlined the mechanisms of disciplinary society, Foucault goes on to attempt to explain the historical factors fanning these isolated disciplinary systems into a larger complex encompassing all of society. Historical documents show that these methods for the increasing of human output naturally became attached to the great essential functions of the eighteenth century, "factory production, the transmission of knowledge, the diffusion of aptitudes and skills, the war machine."[262] This proliferation led to a simple numerical increase in the number of disciplinary institutions. In addition, these internal apparatuses came in time to seek knowledge and power over factors originating outside the institution but impacting performance inside. Schools, for instance sought to know the situation of the child's parenting, hospitals sought information about epidemics in the surrounding city, and charity organizations sought to know and eradicate

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[261] Foucault, Discipline and Punish, 168-169. Foucault is not alone in making this observation. Max Weber also understood war as the basic force in the development of bureaucratic modernity, asserting, "The discipline of the army gives birth to all discipline." Quoted in Roger Cooter, Mark Harrison, and Steve Sturdy, eds., War, Medicine and Modernity (England: Sutton Publishing Limited, 1999), 3. This volume of essays corroborates Foucault's general claims about the birth of modernity by detailed examination of "...the processes by which some of the most pervasive institutions of modernity, from the vast machinery of medical industry and administration to the most intimate of bodily and mental experiences, were shaped by the imperative to regiment and regulate human life for the purpose of conflict between nations," 17.

[262] Foucault, Discipline and Punish, 211.

the sources of social disorder, both in society and the lives of their recipients. Finally, the state began to take over these mechanisms of social discipline. In England this function was filled by charity organizations, but in France it was the police who became the source of information for governance of cities. This web of extra-institutional inspection quite quickly interlaced to complete a new political economy. With this interlacing it became clear that discipline need not be confined to private or circumscribed organizational tasks because,

> Discipline may be identified neither with an institution nor with an apparatus; it is a type of power, a modality for its exercise…a technology. And it may be taken over either by 'specialized' institutions (the penitentiaries or 'houses of correction' of the nineteenth century), or by institutions that use it as an essential instrument for a particular end (schools, hospitals), or by pre-existing authorities that find in it a means of reinforcing or reorganizing their internal mechanisms of power (one day we should show how intra-familial relations, essentially in the parents-children cell, have become 'disciplined', absorbing since the classical age external schemata, first educational, and military, then medical, psychiatric, psychological, which have made the family the privileged locus of emergence for the disciplinary question of the normal and the abnormal); or by apparatuses that have made discipline their principle of internal functioning (the disciplining of the administrative apparatus from the Napoleonic period), or finally by state apparatuses whose major, if not exclusive, function is to assure that discipline reigns over a whole society (police).[263]

Foucault notes three historical pressures that called for the resources supplied by the disciplinary society. First, the steady and rapid spread of mechanized production corresponded with the aptitude of the new political economy of the disciplines, which had already reached a state of relative perfection. Combined with the confluence of the aims and methods of production and discipline, the eighteenth century saw an increase in floating population, a growth which called for a wider power to supervise, and the extension of the modern apparatus of production, which was becoming more costly and required an increase in profitability. The disciplines make it possible to attack the deficits

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[263] Foucault, Discipline and Punish, 215-216.

of a multiplicity of men by increasing not only material production but expanding the production of knowledge in schools, health in hospitals, and destructive violence in the army. In sum, the political techniques of display were simply unable to tame and feed this mass of disordered humanity, without cheaper and more effective methods of social control. Clearly, Foucault contends, "the two processes—the accumulation of men and the accumulation of capital—cannot be separated; it would not have been possible to solve the problem of the accumulation of men without the growth of an apparatus of production capable of both sustaining them and using them; conversely, the techniques that make the cumulative multiplicity of men useful accelerated the accumulation of capital…Each makes the other possible and necessary; each provides a model for the other."[264]

A second historical trend facilitating the spread of the disciplines was the interpenetration of the legal and disciplinary structures of society. Legal structures, which appear today to *limit* the grasp of political power, came to be smoothly integrated with the infra-law of the power *producing* disciplines. Law governs the contractual and thus visible interactions of people, but the disciplines create between people "private" but highly ordered relations based on inequalities of position which make it possible for the legal equality of the contractual partners to be distorted in practice. Panopticism operates on the underside of the law, supporting, reinforcing, and multiplying the asymmetries of power limited by the law. The disciplines in fact work in tandem with law to stabilize power and give it a respectable and moral face at its most intimate interface with individuals. Whereas in the political economy of the public punishment the great masses were never touched by the practical intervention of the law, and were thus hard to reach by power, now the masses are also rarely penalized by the law, but are much more available to movement by political power.

The third social trend which fostered the growth of the discipline society was that the conceptualization of the purpose of law and governance becomes positive rather than negative. "The transition from the public execution, with its spectacular rituals, its art mingled with the ceremony of pain, to the penalties of prisons buried in architectural

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[264] Foucault, Discipline and Punish, 220-221.

masses and guarded by the secrecy of administrations, is…the transition from one art of punishing to another, no less skillful one. *It is a technical mutation.*"[265] What this technical mutation assumes as its background is that the ancient negative right of government to take life or let live has been replaced by a new political technology which deploys positive but no less coercive sanctions in rigorously fostering life.[266] It is a "*biopolitics of population*…a power whose highest function was perhaps no longer to kill, but to invest life through and through."[267]

Foucault speculates that this shift was only possible because throughout human history human life had not been predictably healthy enough to consider a resource to be cultivated. Whether true or not, it is easy to agree with his observation that this shift in practice has occurred in the history of the West. We can therefore understand the force of his claim that in searching for ever more power to be extracted from society, modern political organs function by searching out the dense transfer points in human relations for the application of knowledge so that the force of social interaction can be augmented and controlled. Again, while we may allow that this search is most often undertaken in good faith, it is nevertheless a real penetration of the hidden recesses of social and private life by knowledge, the contact point of power.[268] Premodern society used spectacle to create social unity while the modern age produces it by the opposite procedure: a small but dispersed number who oversee and guide the whole multitude. Political relations between individuals and the state, in a society without a communal public life, can only be regulated by the reverse of the spectacle. "We are", Foucault concludes,

…much less Greek than we believe. We are neither in the amphitheater, nor on the stage, but in the panoptic machine, invested by its effects of power, which we bring to ourselves since we are part of its mechanism… Our society is not one of spectacle, but of surveillance…the play of signs defines the anchorages of power; it is not that the beautiful totality of the individual is

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[265] Foucault, Discipline and Punish, 257 (italics mine).

[266] Michel Foucault, The History of Sexuality: An Introduction, vol. 1, trans. Robert Hurley (London: Penguin Books, 1990), 135-138.

[267] Foucault, History of Sexuality, 139.

amputated, repressed, altered by our social order, it is rather that the individual is carefully fabricated in it, according to a whole technique of forces and bodies.[269]

Modern methods of incarceration are the most simple expression of the political mechanisms which govern all of society; thus in Foucault's view the problem of prisons is the problem of society at large: the combination of the rituals of industrial life with the rituals of coercive supervision. The problem is "…in the steep rise in the use of these mechanisms of normalization and the wide-ranging powers which, through the proliferation of new disciplines, they bring with them."[270] The practical problem of modern society is that its political techniques cannot be restrained nor their aim of the incessant leveling of difference removed. A threshold has been crossed with this explicit embrace by political power of the techniques of the "production" of life: life in its given facticity is no longer seen to be an asset in its peculiarities but rather a "resource" to be systematically cultivated. Modern man has thus become "…an animal whose politics places his existence as a living being in question."[271]

***Biopower and the Spectacle: Arnold Pacey and Technology as Experienced Meaning***

It is important not to begin ethics prematurely by confusing the descriptive and normative tasks. Therefore we stress again, as does Foucault, that the prece ding analysis is not concerned primarily with condemning the sciences in general, nor any specific natural or human sciences, exams, armies, punishment, criminology, etc. These methods have, as Foucault notes, maintained a growing modern population in a state of physical health unsurpassed in previous generations. Yet it must also be admitted that with the increase in power to feed came the increased capacity to annihilate life through war, or to more quickly erase the vestiges of past cultural configurations. The preceding description

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[268] Foucault, History of Sexuality, 103, 142.

[269] Foucault, Discipline and Punish, 217.

[270] Foucault, Discipline and Punish, 306.

[271] Foucault, History of Sexuality, 143.

of the operation of modern political technique is meant by neither Foucault nor myself to be a blanket condemnation or espousal of this historical shift.

The reasons for the development of these techniques (alternately to feed and save from epidemic, and to destroy life in war) do not in themselves constitute an argument for or against future attempts to expand or thwart that power, but are the invaluable data for our constructive evaluation. But Foucault's account, considered as a descriptive project, has an important deficit which it will be the pupose of the remainder of this chapter to remedy. This deficit is not what he affirms but what he denies. While it is true that "Our society is not one of spectacle, but of surveillance,"[272] I contend that it is just as certainly one of spectacle, upheld by modern technological equivalents of ancient gladiatorial entertainment. In his discussion of punishment Foucault outlines the ways in which the visibility economy has shifted so that the powerful operate as part of the penitentiary and surveillance society from a position of invisibility, rather than the high visibility of "the educative theater of punishment." Yet in his eagerness to establish this thesis Foucault wrongly marginalizes the role of visibility in orienting and uniting the masses. On the contrary, modern political power which does operate from a region of invisibility also perfectly comprehends the political capital which may be generated by the technological spectacle; the domes, great wheels, or space flights which strengthen the perception of the political and technical power and benevolence of the ruling regime. Such spectacles play a central social role in augmenting and maintaining the priorities of the technological society by maintaining a particular imaginative horizon for consuming at the same time as creating goodwill for its creators. Yet the spectacle will always share an Achilles heel with the public execution, a susceptibility to symbolic reversal.[273]

This deficit in Foucault's analysis requires a detailed response, in order to show that the inexplicit "natural" knowledge of constructed humanity can also be tapped by political power through *visible* methods. The remainder of the chapter will follow out the work of Arnold Pacey and David Nye in turn, each of whom is concerned to show that how we *feel* about technology is both based in the *practices* built up by technological

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[272] Foucault, Discipline and Punish, 217.

[273] Naomi Klein, No Logo (London: Flamingo, 2000), chapter 12.

society as Foucault describes it, and explains that society's widespread attraction to ceaseless technological remaking. Arnold Pacey's Meaning in Technology argues that technical practice flows from decisions based on frameworks of felt meaning. In diagram form he illustrates the relationships which will serve as the framework for the remainder of this chapter.

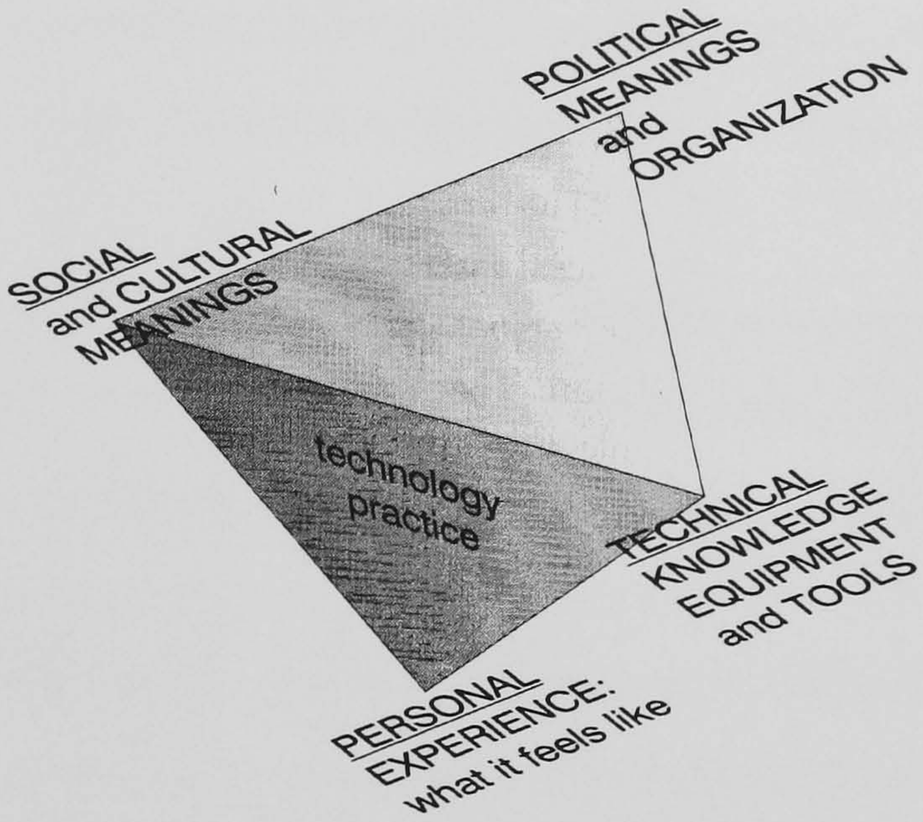


**Figure 1**
Dimensions of technology practice and experience



In the following subsections we will look in turn at each corner of the pyramid, which is built on the insight that many of the things we do, flow not out of rational deliberation but are based on a pre-reflective sense that a given course of action feels meaningful to us. He illustrates the web of referents which guide our making with the example of the fabrication of a sword. The construction of a tempered steel sword rests on a long and complex tradition of knowledge and highly-developed aesthetic skill. The masterful deployment of such skills by the sword-smith makes the physical fabrication process pleasurable and meaningful (technical experience). In addition, if the sword-smith is making a sword for a particular noble, "he would probably picture the fine-looking object he aimed to create rather than the scene of a battle with mutilated bodies. And he would plan a decorative finish for the sword to celebrate his own skill and the owner's status—also, probably, to symbolize the 'heroism' and 'glory' of war."[275] This

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[274] Arnold Pacey, Meaning in Technology (Cambridge, Mass.: The MIT Press, 1999), 8.

[275] Pacey, Meaning in Technology, 175.

personal social enjoyment (social experience) is paralleled with patriotic feelings (political experience). Thus the shape the sword takes would be almost wholly referenced to these three frames of meaning. Furthermore, and most importantly, those meanings most likely would not have been explicitly chosen, but were part of the fabric of intuitive and aesthetic judgments about what was good and proper in the technical, social, and political arenas—in short, the sword-smith makes what "feels good" from each perspective. The role of this "feel", says Pacey, is pervasive and ineradicable.

A cook experiences the textures and aromas of foodstuffs being mixed or heated, and that is the individual experience that he or she uses to make judgments, again as an individual, about how the cooking process is going. But the cook is also aware of the shared, social meaning of the meal for the people who will eat it. The designer of a locomotive or an airplane may personally experience considerable satisfaction as the concept takes shape on the drawing board or computer screen, and his or her visual responses may inform some technical judgments. But the designer must also consider whether the finished machine will have an appropriate social meaning for the passengers it will serve—whether it will look safe and reliable, for example.

It is possible to think of these various meanings of technology in terms of a hierarchy of levels, with individual experience on the most private level and the experience of the consumers of cooked food, the train passengers, and other groups as a more public, social level. Beyond that, the political meanings of technology…are on the level with the widest ramifications of all.[276]

To properly analyze the genesis of contemporary technological practice we simply cannot ignore the relation between felt meaning and practical ends in each of these complex arenas. In speaking about meaning in this way we must point out that conflicting meanings can and do exist simultaneously because meanings and purposes are almost inexhaustibly complex, shading off into generalized yearnings and undefined aspirations.[277] But despite this fluidity, Pacey argues that the "feel" of meaning is best encapsulated using the following schema: 1) the technical feel of the process, 2) the feel

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[276] Pacey, Meaning in Technology, 89-90.

[277] Pacey, Meaning in Technology, 91, 97.

of how the artifact will affect others with whom we are personally involved, 3) and the feel of how the artifact will change the wider political landscape.[278] We will draw out in turn the importance of each for modern technological practice.

## Technical Experience and the Perception of Meaning

Recalling a Heideggerian theme, 'equipment' will help us to grasp Pacey's argument that all technical experience depends on many layers of necessarily tacit or inexplicit knowledge.

> A skilled driver, by *retaining* from his experience, knows how his automobile will respond to certain throttle manipulation: he *awaits* or *expects* the same kind of response as he now manipulates the throttle. These are *not* elements of the future and past: rather, they make up the *actual activity of the present*. The driver, in pushing the throttle, does not say to himself: "I will speed up": rather, as he pushes the throttle, he feels: "I *am* speeding up." The present, after all, is significant existentially only in terms of action and situations. It is only because there is such a thing as a *meaningful existential present* that such a thing as "involvement" in equipment is possible.[279]

> Such indefinable knowledge is an essential part of all human life and work. Checking a dial, using a tool, getting the color right, for all of these the "eye" or the "hand" has been trained to recognize instinctively what is correct and what is incorrect. All craftsmanship has an ineradicable tinge of art, because it "so regularly calls for aesthetic, quasi-intuitive judgments."[280]

This art of the trained intuition is both essential to good work (as when a carpenter picks the right piece of wood for a task) and imparts meaning to the work via a sense of

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[278] Pacey, Meaning in Technology, 90.

[279] Gelven, A Commentary, 197.

[280] Pacey, Meaning in Technology, 64.

aesthetic satisfaction.[281] The intuitional nature of traditional craft work and artisanship is apparent, but even modern information technology depends on this same intuitive feel, Pacey points out. He traces the modernization of the processes of steel-making, which was traditionally a very tactile task involving a multitude of methods for judging when the steel is ready for cooling.

In this instance, managers expected modernization to yield improvement in reliability, economic performance, and quality control. They also expected to employ fewer skilled people. But the problem now was that plant operators sat in a control room remote from the material being processed. They were surrounded by data in the form of digital printouts and displays on glowing screens. There was just as much skill and insight needed as in using twenty-six visual-cum-tactile methods for judging the state of the steel. But it was a different kind of skill, and until it had been learned, plant breakdowns were more frequent and costs were adverse.[282]

The irony of the computer age, remarks Pacey, is that, "people thought they had made knowledge entirely objective and believed that they had disposed of the need for intuitive judgment based on participatory experience—yet in both instances, some of these skills still proved to be necessary."[283]

It is patent that good human making requires ingenuity and skill. Likewise, as we will discover Augustine to have known long before, ingenuity and skill are goods in themselves and to be enjoyed. Human making, if it is to be good, depends on this existential engagement with one's work. Traditionally, limits on this form of enjoyment were tied to its integration with local patterns of life and material availabilities, local uses, etc.[284] Thus this tacit "feel" for good work was deeply imbedded, in technical skills, local political structures, and the availability of materials.

But problems arise when the technical abstractions which describe technically good work become the *sole* focus of the existential pleasure of work. This abstraction

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[281] Pacey, Meaning in Technology, 67-68.

[282] Pacey, Meaning in Technology, 73.

[283] Pacey, Meaning in Technology, 74.

[284] Pacey, Meaning in Technology, 114-115.

makes possible the severing of technical tasks from their social and political context. Pacey points out that the technical task itself may become the focus of existential meaning for a variety of reasons. The puzzle-solving aspect of work may engage the inventor, whether the challenge is intellectual or manual. "Indeed, one psychologist has suggested that 'the ability to channel one's interests, even obsessively, may be a condition for producing original work.'"[285] From another angle, there is an arousal associated with power and control.[286]

The problem of narrowly focusing one's sense of meaning on the technical task is that it becomes object-centered to the detriment of the other aspects of the impact of work. In short, the intrinsic enjoyment of the work itself overrides empathetic attention to the larger context, the existential spatiality, within which the work exists.[287] This narrowing of focus on the existential pleasure of good work is exacerbated by the abstracted nature of modern manufacture and can be exploited by political technique which revises the visibility structures of work for dubious political ends. For example, When napalm was first used, it was not always effective because, if the victim was quick enough, he or she could scrape it off. During the Vietnam War, industrial chemists were asked how to make it stick, a request that could be dressed up in scientific abstractions and that was dealt with by adding polystyrene. For the chemists, this was a narrowly technical question, and they did not have to dwell on the way napalm would now 'keep on burning right down to the bone.' Nor did the aircrew who dropped it on Vietnamese villagers have to think about this as they had fleeting glimpses of their targets. Nobody came face to face with the reality of what they were doing.[288]

Such management techniques are most clearly obvious in modern weapons design in which "…progress has 'consisted mostly in eliminating…the chance of face-to-face combat.'" High altitude bombing, long range artillery, automated weapons, land mines, each makes violence more palpable by making the enemy less human, and information

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[285] Pacey, Meaning in Technology, 182, quoting Liam Hudson.

[286] Pacey, Meaning in Technology, 180-185.

[287] Pacey, Meaning in Technology, 176.

[288] Pacey, Meaning in Technology, 176-177.

technology "...more than any technology that preceded it has succeeded in obliterating the humanity of its human objects."[289]

Psychologist Stanley Milgram's experiments of the 1960 s' and 1970 s' showed that even when face to face with distressing outcomes of our work, a common response to the moral conflict produced is to dull it by sublimation of the moral identity into one judged in terms of exemplary completion of technical task.[290] The skilled manipulation of this division of labor to minimize psychological or moral scruples, or maximize the controllability of the workforce in time begins to "feel" right to the skilled manager. At the same time, for the worker, the radical redirection (not loss) of moral concern, from concern with the subjects of his action to how well he has satisfied the authority over him or the demands of the technical task, *also* comes to "feel" right—the laying aside of our own moral deliberation about the ends of our work by passing it off on the authorities we obey becomes a viable option, even in post-Holocaust democracies.[291]

## Social Experience and the Perception of Meaning

Existing in parallel with the personal existential meanings of the technical task is the experience Pacey calls social meaning, continuing,

> ...the *social* meanings of technology coexist and interact with the *personal* responses and "existential" experience of individuals. A cook who does not enjoy the colors, textures, and scents of food in different stages of preparation never becomes skilled at the job. But the cook is also motivated by awareness of the social purpose and context of the meals he or she prepares. Similarly, inventors, engineers, and artisans may have intense personal experience of materials, or of sweetly running machines, but at the same time, they are also members of society, responding to public enthusiasms, political influences, economic conditions, and other aspects of their social environment. The inventors of television, for example, were well aware of the social

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[289] Pacey, Meaning in Technology, 178, quoting Zygmunt Bauman.

[290] Stanley Milgram, Obedience To Authority: An Experimental View (London: Pinter & Martin, 1974), 25.

[291] Milgram, Obedience To Authority, 163.

meanings of the theater, music hall, and cinema, and were aware also of the potential of combining the visual, dramatic appeal of these media with the immediacy of radio.[292]

This sense of the social environment may be instinctively perceived, but is often systematically sought through the studies of economists or market researchers.[293]

We will see in chapter six that Augustine applauds the sense of communal spirit and desire to satisfy the needs of others which has been the hallmark of the rhetoric of the scientific age, and which has intimate connections with the Christian humanism of the west. But this positive aspect is paralleled by the negative possibility that this social community whose interests are sought easily shrinks into a self-referential community. For instance, medical or agricultural researchers and technologists may pursue projects which within the terms of the scientific community are an unambiguous success yet find their "success" met by an apparently inexplicable public outcry. Researchers who tout miracle cures for disease or hunger are, Pacey says, "often found to be cut off from the people they seek to help by their laboratory environment, and are sometimes unaware of the way agroindustrial businesses exploit science and innovation to control markets, often in remote countries."[294] Such abstraction from the wider implications of their work is exacerbated by those in "frontier science", Pacey notes. If the public does not understand what the brilliant alchemist is engaged in, then the scientist can at least rely on his community to understand that his work is good and good for all. Together and with a sense of communal excitement the research team ford the river into the new land of power and danger.[295]

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[292] Pacey, Meaning in Technology, 78.

[293] Pacey, Meaning in Technology, 79.

[294] Pacey, Meaning in Technology, 79.

[295] Pacey, Meaning in Technology, 188.

Political Experience and the Perception of Meaning

Turning finally to the last corner of Pacey's pyramid, the political experience of technology creation, we find another facet of the technological "alchemist" role coming to the fore. Political power has long recognized the political capital to be gained by supporting the efforts of the civilizing explorer. Pacey speculates that the colonial projects of the modern west entrenched the expectation that the civilized world would bring order into whatever disordered arena it entered. Between 1870-1970 the frontier mentality and enthusiasm (and especially the American frontier mentality) shifted from a focus on the conquest of *space* to the *technical* frontier. "Today, funding and political support are still attracted to projects that seem to have frontier characteristics: space exploration, the human genome project, and even, for a while in the 1980's, the 'high frontier' of the Strategic Defense Initiative (the Star Wars project)."[296]

That scientists continue to forge ahead in this ever-expanding frontier indicates massive political support (recalling our observation that science and technology are an arm of production): "the characteristic pattern of research in the twentieth century has been that a connection with industrial or military power allows engineers and scientists 'to dream in an expansive fashion,' and the huge resources commanded by that power 'brings their dreams to life.'"[297] If technologists are allowed to "dream in expansive fashion", what is the benefit accruing to political power?

David Nye's American Technological Sublime explores the way the emotional and psychological force unleashed by the special effect and showpiece technologies, or concretized in events such as setting foot on the moon or objects such as the skyscraper, can be converted into political capital. As a lens for this discussion Nye contrasts the modern experience of the sublime with the Kantian notion of the sublime utilized by the eighteenth century Romantic movement, which was defined as an experience setting off a

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[296] Pacey, Meaning in Technology, 181. Sadly, this sentence can no longer be uttered in the past tense.

[297] Pacey, Meaning in Technology, 89, quoting Tom Athanasiou.

permissible eruption of emotion that overwhelmed the reason for a short time, only to be recontained by the reason.[298]

In the Critique of Judgment Kant defined two types of sublime, the mathematical and dynamic sublimes. Mathematical sublime is the encounter with extreme magnitude, or vastness, such as that provided by a far-reaching view. The dynamic sublime is the scene which arouses terror, the great storm, or a volcanic eruption, which the subject views from a safe distance. Nye correctly points out that Kant's definitions of the sublime as either vastness, dynamism, or both is easily and correctly applied to many technologies, including, we might add, the "invisible" ones such as the genome project, or the fascinating world of the miniature machine.

Sublime experience is not merely a matter of vision; all the senses are engaged. Burke noted that, although the eye was often dominant, movement, noise, smell, and touch were also important. A city sounds much different at the top of a skyscraper than on the street below. The wind makes one feel more vulnerable out on the open span of a long bridge. The steam locomotive shook the ground and filled the air with an alien smell of steam, smoke and sparks; the Saturn rocket did much the same thing on a larger scale. The strong contrast between the silence of a rocket's liftoff and the sudden roar that follows a few seconds later is also a vital element in making that spectacle sublime. The sheer size of the crowd attracted to a technological display further arouses the emotions. In each event, the human subject feels that the familiar envelope of sensory experience has been rent asunder.[299]

Despite Kant's contention that the notion of sublimity could only be used to describe nature, what he described came to be increasingly associated with technological feats which lead to a reversal of its effect on the viewer. Kant understood the supreme sublime to be the hurricane; the industrialist sees it in the steel mill's flame and fury. Kant's sublime contextualizes humanity through a sense of insignificance, but the industrialist's induces wonder at the human mastery and ingenuity applied to containing

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[298] David E. Nye, American Technological Sublime (Cambridge, Mass.: The MIT Press, 1996), 5.

[299] Nye, Technological Sublime, 284-285.

such a maelstrom.[300] Nye argues that in the present era this sensitivity to the sublime in human creation has come to be a regular part of social life, an internalized taste for spectacle.

Whereas Americans had once made pilgrimages to natural wonders in order to sense their place in the natural order, in 1986 they treated technological achievements as signs of political stability and dominance over nature. That attitude had already begun to emerge in the public response to the railroad and the telegraph, but by the late twentieth century the omnipotence of engineering had been internalized. It was no longer necessary to declare that machines were sublime. Indeed, it was hardly necessary to say anything at all, as President Reagan's short speech [rededicating the Statue of Liberty] suggests. He could simply turn on the lasers and watch the fireworks.[301]

Lost is Kant's desire for moral growth, replaced by an insatiable taste for the novel products of the genius engineer's work directly tappable as political capital.[302]

Thus is the human impulse to wonder politicized, Nye contends. Technological sublime creates awe not for the laws of nature but for the engineers and businessmen who have created the machinery which tames the uncontrolled or taps vast powers. This radical shift in the focus of awe has become a seminal phenomenon of industrialized society. Kant believed that the natural sublime was a natural good, the experience of which lead to an enlightened awareness of transcendental reason. The corporate and manipulative technological spectacle which is so prevalent in the modern west moves in the opposite direction, seeking to impress and pacify while building support for the technician and financier who produced the spectacle.[303]

Invisible technologies, i.e., technologies which do not become well known to the public, would not serve to develop the public momentum desired by policy makers. "Big projects," conversely, raise the profile of certain types of questions and solutions, depressing awareness of less flashy and human problems. Big projects remind the

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[300] Nye, Technological Sublime, 131.

[301] Nye, Technological Sublime, 277.

[302] Nye, Technological Sublime, 153.

[303] Nye, Technological Sublime, 197, 222.

populace that with the current regime all is possible. Thus the technological sublime is always the promise which the power/technical elite offer to the public. When it is promised it is couched in terms of the *eradication* of disease, or the development of an *unprecedented and safe* power over nature, or a natural evil, an unprecedented boon for humanity.[304] Foucault is not alone in his Nietzschean sensitivity to the tactical use of the language of morality in defense of spectacles using the language of established values. "We have all seen how government…invariably portrays its goals in morally favorable terms," Milgram says, "how, in our own country [USA] the destruction of men, women, and children in Vietnam was justified by reference to saving the Free World, etc. We see, also, how easily the pronouncements are accepted as legitimizing goals."[305] The point is that these spectacles appeal to technological humanity because they have been thoroughly penetrated with the priorities which these spectacles seek to satisfy. Create a society of technicians and the only thing that can convince them they are ruled well is a technical feat. When a railroad, skyscraper, or mapped genome is offered to the public, the power of the technician to disrupt a human perception about the barriers of the natural world is reinforced, demonstrating the potential omnipotence of technical expertise as supported by the present social system, whether this new feat is an actual boon or not. Each promised new feat reinforces the sense of technological progress, even as the technological success quickly becomes part of the "given" and expected.[306]

In addition to its political usefulness in solidifying the present regime, Nye continues, the technological spectacle attempts to gain support for the regime's *particular* vision of the future.[307] Lewis Mumford spoke for a generation of capitalists when he

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[304] The importance of the surplus of political effects over actual effects of spectacular technologies can hardly be over estimated. One of many illustrations of this gap is the unlimited investment post-WWII Russia devoted to the construction of the atomic bomb in an attempt to prove is "modernity" to the west and to itself, despite these weapons having severly limited military value. See David Holloway, Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939-1956 (New Haven: Yale University Press, 1994), chapter seven.

[305] Milgram, Obedience to Authority, 233. Cf. George Orwell's Animal Farm.

[306] Nye, Technological Sublime, 285.

[307] Nye, Technological Sublime, 200.

explained what he desired from the 1939 New York World's Fair: "The fair, he argued, should tell a story through architectural form, showing the public an orchestrated future… 'If we can point toward the future, toward something that is progressing and growing in every department of life and throughout civilization, if we can allow ourselves… as members of a great metropolis, to think for the world at large, we may lay the foundation for a pattern of life which would have an enormous impact in times to come.'"[308] Given the proper spectacle the "inevitability of the future", with its concomitant political backing, will be secured. Elaine Graham sharpens this point by noting that the scientific prediction of future "advances" are as much exercises in story telling and future-making as science fiction. Indeed, science fiction as a genre legitimates and sustains the discourse of scientific "prediction." Her point, and the point of this section, is that asking about the representation of technology opens up consideration of power and authority: who will define present practice?[309]

Nye recounts some of the social costs of this mode of securing political unity. A primary effect is the shift in public attention toward the prospective users of grand technologies, and away from the human costs which may have accompanied their construction. Historically, producers and middle class consumers were awed by the vast symmetry and productivity of industry, and blinded to the reality that these complexes of machines were less than desirable when judged in terms of the lives of the workers who tended and constructed them and the citizens who were excluded from using them.[310]

Nye points out that another side effect of the technological spectacle is to augment the perception of technology being the fixed point in a sea of ephemeral and transient humanity.[311] The spatial and present foreshortening of the human landscape in favor of the mechanical is exacerbated in the temporal and historical frame of the memory. The whole

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[308] In Nye, Technological Sublime, 207.

[309] Elaine L. Graham, Representations of the Post/Human: Monsters, Aliens and Others in Popular Culture (Manchester: Manchester University Press, 2002), 20, 27-28, 226.

[310] Nye, Technological Sublime, 118.

world watched, for example, the first steps on the moon, but how many knew the social context or the costs of that effort? With the passage of time the number attuned to human effects, inevitably small, receded as the technical event itself and its main players, the rockets, took on iconographic status. This focus on material rather than human reality is an inevitable collateral cost of directing public awareness through the technical feat.

Nye indicates another social effect of the new sublime: it is attached to consumption. Having been sold a certain exhilarating future, the consumer's eye for the value of their purchases is transformed. The purchase inaugurates a future in which human frustrations are resolved by new material arrangements, as glossy stage-managed promotions illustrate what the world will look like when we all have electric cars and silent helicopters, not to mention fail-safe protection for sex. Once the viewer accepts the spectacle, the product is both the proof and beginning of a future already under way (a secular eschatology). But once again, the distorting effects of such vision redirection are hidden from view by the presentation of this single-faceted utopian future which hides the tradeoffs which might be inherent in a world where all accept the promised future. A new material relation is envisioned which solidifies a conservative view of political and personal social relations. In such a world no space is given to human weakness, only glory in human power. Tellingly, this is the template for the theme park, the magical kingdom, the true school of the imaginations of contemporary youth.[312]

Another effect of the social phenomenon of the technological spectacle worries Nye: it erodes democracy by intending our acquiescence in political control by an educated elite who propose to uplift all humanity by their expertise. The spectacle first enhances the belief that democracy and state or private control of technological progress are obviously compatible notions. Second, it creates citizens who experience a visceral and internal link between technological control and patriotism, an identity which takes pride both in the technological artifacts produced by their nation and in their identity as part of that

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[311] Nye, Technological Sublime, 105. This focusing of perspective reverses the Biblical relation of earthly transience and stasis: "A generation goes, and a generation comes, but the *earth* remains forever." (Ecclesiastes 1:4) Emphasis mine.

[312] Nye, Technological Sublime, 220-224.

powerful entity.[313] Such beliefs can paradoxically exist even as other public sensibilities such as a desire for free speech, legal protest, labor practice, and job security are eroded.[314] The very fabric of democratic habit is displaced. How? Gone from the modern technological spectacle,

> …was the power of the word that Jefferson had known to rouse the national spirit. Gone was the citizen who, in Baltimore or New York in the 1820's, actively helped to form the parade or watched friends and neighbors display the cohesion of the community. Gone were the visible links between work and product, between commerce and politics, between technology and human agency. To the public, the technologies that Ronald Reagan put into play by pushing a button at the 1986 event were anonymously spectacular. The rededication of the Statue of Liberty, like the launch of Apollo XI, was nearly empty of the contents of political life required by republicanism. Neither made any reference to a virtuous citizenry, and neither made the once-common claim that a new technology was a moral machine that would elevate the people. Instead, each was a massive display of organizational and technical power. Each encouraged the belief that democracy and state control of advanced technology were compatible. Each event presented a technical achievement as a sign of national greatness, encouraging the citizen to introject this vision of power and make it a fundamental part of personal identity. In this way, each enhanced the technological sublime as a category of American political experience.[315]

These observations force on us the realization that if freedom-loving people eagerly embrace repressive models of social interaction, the power of technological imagery in the contemporary context has been shown to be awesome indeed.[316]

By utilizing the insights of Foucault's method, the accuracy of Pacey and Nye's perceptions of the power of political experience may be tested by comparison with premodern political power. Premodern citizens felt impressed by pageantry, and political rulers augmented their power by satisfying this desire. Moderns, by contrast, most often

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[313] Nye, Technological Sublime, 234-235, 279-280.

[314] Klein, No Logo, 96-100.

[315] Nye, Technological Sublime, 279-280.

[316] Pacey, Meaning in Technology, 89.

think royal pomp a quaint, historically interesting exercise. We simply have different matrices of awe. We are impressed by technological power, and thus modern political power displays its mastery through technology. But neither in ancient nor modern spectacles were the *reasons* why such spectacles were experienced as impressive made explicit: the reasons remain implicit to its participants.

As we have seen, in relation to technical and social aspects of experience there is no theological reason to deny that facets of the technological world evoke sublime reactions. We cannot remove the size from an ocean liner, nor the speed from a jet, nor the elemental danger from heavy industry. But we can become aware of the ways in which sublimity itself has been deeply integrated into modern political economics. A preliminary theological assessment of the spectacle is possible by allusion: it might be impossible to take the awe-inducing nature out of Jesus' miracles, but the sublime is not the meaning of the miracles. The constant tension of the Incarnation will always be that its miraculous nature rightly evokes this emotional reaction, a reaction which easily leads us onto sinful and self-destructive worship of secondary facets of God's self-revelation.[317]

Most importantly, in talking about technology it is critical that the place of the technological spectacle in political technique be kept clearly in view, as well as the ways in which certain projects become more attractive to the scientific establishment because of their consensus building value. We must not let Foucault's insight about the hiddenness of power distract attention from the visible face of power, which Pacey and Nye have established as integral to political technique in modern society. That these spectacles aim to motivate through attraction is an obvious indicator of the perspicuity of Foucault's vision of the modern state's orientation toward an ever-growing possibility to use technological power to augment power itself.

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[317] See Karl Barth, Church Dogmatics IV, The Doctrine of Reconciliation: Part 2, trans. G. W. Bromiley, ed. G. W. Bromiley and T. F. Torrance (Edinburgh: T & T Clark, 1958), 211ff.

## *Meaning, Experience and Foucault's Promise*

### Foucault's Disinterest in Setting Will Under External Responsibility

I have argued that Grant establishes the perspicuity of Heidegger's claim that the question of technology revolves around establishing the proper authority which displaces the desire for human freedom to remake all things. But Foucault denies this claim, inverting the Kantian project of discerning the limit of that which we can know by saying, "I shall thus characterize the philosophical ethos appropriate to the critical ontology of ourselves as a historico-practical test of the limits we may go beyond, and thus as work carried out by ourselves upon ourselves as free beings."[318] With this espousal of "a new age of curiosity"[319] comes the embracing of the will to power: he rejects, "everything in Western civilization that restricts *the desire for power*."[320] With direct references to Nietzsche, Foucault falls into the paradoxical ethic parading as description which has no other goal than ceaseless remaking of ourselves. We must applaud Foucault for following Nietzsche's frank coherence in admitting that this definition of freedom risks on one hand real, physical self-destruction, and on the other simply embraces the erasure of past culturally-defined definitions of the human. Both are the inevitable "injustice proper to the will to knowledge."[321]

Having already agreed with Grant that the use of the term 'should' implies some sort of transcendent referent against which human action may be measured,[322] it appears that Foucault has deeply problematized any use of the word "ethics." Since Foucault

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[318] Foucault, "What is Enlightenment?" in Ethics, 316.

[319] Foucault, "The Masked Philosopher," in Ethics, 325-326.

[320] Foucault, "Revolutionary Action: 'Until Now'," in Language, Counter-Memory, Practice: Selected Essays and Interviews, ed. Donald F. Bouchard, trans. Donald F. Bouchard and Sherry Simon (Ithaca, New York: Cornell University Press, 1977), 221.

[321] Foucault, "Nietzsche, Genealogy, History," in Aesthetics, 389.

[322] Grant, "The Computer Does Not Impose on Us the Ways It Should Be Used," in The George Grant Reader, 429; O'Donovan, Twilight of Justice, 134.

denies such a transcendent standard, ethical vocabulary is narrowed to aesthetic observations and rhetorical enticements.

## Foucault's Promise

Foucault's work contributes two main insights to this study. The first he has established by fleshing out the relevance of Heidegger's concept of world: survival in modern society is based on a wealth of inexplicit knowledges including a hidden knowledge of political economy. This new and radically intimate political power, Foucault argues, "is tolerable only on the condition that it mask a substantial part of itself. Its success is proportional to its ability to hide its own mechanisms."[323] Foucault has established that we moderns internalize the social order, or rather grant our social structure strong though tacit normative value.[324] We have seen how this was accomplished in modern political life through the application of a vast and yet minute political technology which assumes the signal importance of the internalization of responses to certain stimuli/commands.

This trait is not unique to our age. Even in the torture or ritual-based political economy legal prohibitions had to be memorized, to be on the lips of the populace, in order to act as a deterrent. If these laws were unknown, the motivational force of the execution on public behavior would have been lost.[325] We should not be surprised then that in order for our contemporary political economy to function, we too must be imprinted with the "rules" of modern society. The self-evidence of our beliefs makes us governable; we are governed precisely by those beliefs not open to conscious scrutiny. By uncovering the technological sinews of modern methods of political power, we begin to see how seriously ingrained we may now have become with a technological view of all things which, to function, must be evidently and transparently true.

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[323] Foucault, History of Sexuality, 86.

[324] Milgram, Obedience to Authority, 133, 156.

[325] Foucault, Discipline and Punish, 96, 101.

Critique of explicit knowledge is a rather straightforward project, hence the briefer time spent with Grant, and the more extended exploration of the implications of Foucault's work. By taking tacit knowledge seriously, Foucault's thought represents a subtle but profound advance on most thinking about technology. He refuses to look at technological being as somehow imposed on the "natural" or non-technological. Instead he looks at the ways we take up views of freedom by which we are formed, and by which we constrain and discipline ourselves.[326] This approach improves on Grant's more idealist responses which tend to speak as if technological logic is a discreet idea possessed by our conscious minds. Foucault radically questions the assumptions of TA, making it clear that the method of TA will be deployed in practice according to a range of tacit assumptions which its theoretical structure does not acknowledge. In other words, to make decisions about new technology using TA is, in Heidegger's terms, to be enframed by technological being.

Rather than leaving us fettered by our tacit knowledge, Foucault's development of the concept of problematization is rich with promise. He has both established that we are constructed beings and indicated ways this construction might be questioned from within the context of dilemmas created by practical questions.

Finally, Foucault has established that for a political power to see a population as standing reserve means in our age that it seeks to treat it as biopower. He has confirmed that Heidegger's concepts of 'world' and 'technology' do indeed illuminate the contemporary 'equipment' of the 'work' of political governance. The next chapter, beginning Part II of this study, will argue that being unmade as technological beings is possible in the transformation of grace. After arguing for this possibility I will return to evaluate in terms of human action, or ethics, what it might mean for us as political beings to be transformed into the likeness of Christ in a technological society. But before doing so, I summarize Part I with a case study.

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[326] Foucault, "The Ethics of Concern for Self as a Practice of Freedom," in Ethics, 221.

### *Summarizing Part I with a Case: Tabulating Fertility*

A brief examination of a case will serve as a conclusion to and summary of Part I. Let us suppose that our ten men were considering whether to fund research on and construction of a machine which would mechanically test extracted human ova as part of the *in vitro* fertilization (IVF) process. The new machine will generate digitized information about the ova, allowing comparison with computerized databanks containing information about chromosomal defects. This will allow ova to be sorted and suitable specimens fertilized prior to implantation in a woman's womb.

Part I has been seeking to widen the ways we *deliberate* about the development of technology, the necessity of which becomes more apparent with a technology that appears to have no precedent. We have seen that TA asks such questions as: What changes in the business and social climate have made this innovation attractive or indispensable? Are we leading our competitors in offering a path-breaking product or following them to avoid being displaced from the market? How will this innovation impact practice in the fields of medicine and research in which it is used? How will these changes shift relations with labor and the environment? Each of these questions will be framed to answer one underlying question: How will taking or refusing this decision advance the position of the company (or nation)?

The analysis of Part I has suggested that such deliberation is insufficiently inclusive for making a well-informed decision about investment in a new technology. Heidegger and his interpreters have insisted on the importance of two distinct regions of questions for moral deliberation which seeks to escape a simple replication of the technological imperative.[327] The first queries the social context in which decisions are made, and the second the forces bearing on decision makers. The important point is that these two regions of inquiry must be part of a proper deliberation about new technology, and must remain open even if the way we frame responses to them undergoes revision. In seeking to give some content to these two regions of questions by deliberating about an

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[327] Having come this far in the analysis it is important to admit what will have already become apparent: the modern technological imperative functions in tandem with the capitalist imperative.

ovum testing machine, the way feminist interpreters have answered the questions in these two regions will serve as one attempt to indicate the proper depth and breadth of answers which are necessary for pursuing a well-rounded deliberation about new technology within the two regions of questioning urged upon us by Heidegger and his interpretors.

## A. Locating IVF in its Social Context

This first domain of questions attempts to lay bare the way the technology grows from and augments or dismantles the social context within which action takes place. What part does the proposed technology play in the contemporary 'world' as Heidegger has defined it? This question is clarified by asking, How will it change our social practices and with what practices does it cohere? What kind of thinking does it betray? And how will it change humanity?

### *Situated Within a Context of Theory*

Judy Wajcman's overview of feminist thinking about reproductive technologies observes that throughout patriarchal societies male control of and access to female sexuality was a central focus. In the contemporary context male control over female bodies is expanding via medical technologies to take a more pervasive control of events beyond sexual contact, i.e. reproduction and childcare, in short, motherhood. This vein of feminist analysis understands *in vitro* fertilization, egg donation, sex predetermination and embryo evaluation as powerful new ways for men to control women, especially when they become widespread social practice. If this occurs, social pressures will be arrayed against women simply hosting a child, because they will be expected to submit them to medical expropriation and "improvement" which leads to the deployment of such technologies as genetic engineering for eugenic purposes.[328] It seems inevitable, Charlotte Bretherton and Karen Stevenson comment, that "increasing numbers of women will face

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[328] Judy Wajcman, Feminism Confronts Technology (Cambridge: Polity Press, 1991), 58-59.

decisions—having evident eugenicist connotations—concerning whether or not to terminate their pregnancies."[329] The negative eugenics of aborting the substandard might not become the positive eugenics of creating the 'above-average', yet it is clear that the use of new technologies already serves a eugenic role by encouraging expression of heretofore inexpressible parental desires. For instance,

> [C]urrent utilisation of prenatal diagnostic procedures shows distinct patterns of North/South difference. In the North they are 'primarily associated with middle-class demographic needs and desires—smaller families, better babies, etc.'…In the South they are used as an instrument of population control through selective breeding of male children. In both cases important judgments are evident concerning those members of society who are valued and those who are not.[330]

Grant's analysis has given us reason to take seriously this line of questioning of the emplacement of these technologies within a social context. He asks us to include in our deliberation questions about whether reproductive medicine plays a part in a trend which respects the given, material reality of the woman, egg and child, perceived as having interesting and unique characteristics of its own. Or is it rather part of a thought world in which mathematecized method is applied to raw material in order to "improve" it? Grant has indicated that there are good reasons to wonder if the testing of ova might indeed be playing a role in the proliferation of what he calls "technologies of the helmsman", which preclude social unconformity and wonder at unmanipulated material order.

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[329] Charlotte Bretherton and Karen Stevenson, "Ambivalence and anxiety: women and the techno-scientific revolution," in Alan Russell and John Vogler, eds., The International politics of biotechnology: Investigating Global Futures (Manchester: Manchester University Press, 2000).

[330] Bretherton and Stevenson, "Ambivalence and anxiety," 57.

*Situated Within a Context of Social Practice*

Some feminist commentators, Wajcman says, emphasize the ambivalence of contemporary uses of fetal and maternal medicine on actual women's lives. While in theory offering the possibility of greater choice for women, in practice the ways these technologies are deployed often submerges women's maternal desires within masculine power structures which determine their use. Within the wider realm of "fetal care medicine," Wendy Farrant argues, at least one technology which can be understood to have been developed as part of the range of medical resources for improving the health of babies, has in effect narrowed mothers' possibilities for improving the lives of their nascent children. Prenatal screening in Britain, rather than empowering women by providing new possibilities for treating the sick neonate, has in fact taken the form of a demand for termination as a condition for providing amniocentesis. The technique has been alienated from the purpose of enabling women to make choices about their reproduction and the good of their child and become linked instead to population control.[331] In addition, feminists say, the ways such screenings are carried out not-very-subtly affects definitions of "disability" in ways which disempower both women and "handicapped". As a result, gendered power relations determine what and how these technologies are utilized.[332] At the same time, the high cost and poor public funding of fertility techniques produces a race and class bias which is exacerbated by the operating procedures for selecting recipients of treatment.[333]

Foucault has asked us to consider the form and effects of the biopower and surveillance society, and has given us good reason to wonder if the proposed egg-testing machine our ten men are considering will accelerate or thwart its current trends. His thought suggests that the widespread testing of embryos would be attractive to a society devoted to the augmentation of biopower, and has indicated how the insertion of a technique for gathering information, in this case the examination of ova might redirect

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[331] Wendy Farrant, "Who's For Amniocentesis? The Politics of Prenatal Screening," in Hilary Homans, ed., The Sexual Politics of Reproduction (Aldershot: Gower Publishing Company, 1985).

[332] Wajcman, Feminism Confronts Technology, 60-63.

[333] Bretherton and Stevenson, "Ambivalence and anxiety," 56.

and imbalance power relations, for the purposes of benefit to social planners rather than patients, mothers and children. In a society in which testing and examination are so susceptible to being integrated with centralized social decision-making, we are given reason to carefully consider the fears of feminist commentators that ovum testing may quickly become just another, and more intimate, form of invasive biopolitics.

*Situated Within the Recreation of Humanity*

We have already seen that feminists are worried that widespread testing of eggs and embryos will have the effect of redefining the "defective" human. They are also worried that IVF is a Trojan-horse—not curing or attempting to cure infertility (which would mean couples could bear children when desired and conceived through penetrative sex) but through a massive technical intervention for each, or any, conception, simulating normal processes. Such a simulated fertility, while not truly returning the full abilities of fertility, encourages the entrenchment and internalization of traditional social roles of the woman as mother. Claims made by medicine for the technologies strengthen the ideology of women's "natural" need to mother while not actually providing it, leaving women with a new "need" and a new worry which can only be remedied by intervention.[334] Whether or not such worries are "naturally" occurring, there are good reasons for medicine to encourage them. "The construction of infertility as a medical problem suffered by individual couples, and requiring costly interventions, is big business. In consequence, commodification is expressed through marketing reproductive services in a manner which misrepresents success rates (there are a number of methods of calculating 'success; of which producing 'take-home babies' is only one); through recommending assisted procedures at an earlier stage than necessary, or when the prospects for success are poor; and through generally glossing over the discomfort and stress associated with the

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[334] Hilary Rose, "Victorian Values in a Test Tube: The Politics of Reproductive Science and Technology," chap. in Michelle Stanworth, ed., Reproductive Technologies: Gender, Motherhood and Medicine (Cambridge: Polity Press, 1987), 171.

procedures, whether they succeed or not."[335] As this scientific and social apparatus is devoted to convincing people that childlessness is a "reversible disease", medicine maintains a consistent bias: the woman is under the most sustained physiological scrutiny, being considered defective in a way that a man is not.[336] The result of this complex of trends is that infertility can no longer be understood by a woman as a "given" to be lived within, but has become a "disease", meaning that the "decision" not to undergo technical intervention comes to be seen as a decision against women's "natural" capacity for mothering.[337]

Heidegger has asked us to consider our social environment in its pervasive effects on our thinking and practice, and has warned us that contemporary practice may be understood as technological, i.e. reducing all things to standing reserve. He has also argued that we don't just *see* things this way, we *are* this way—we are this kind of being, who acts and reacts "naturally" in this way because we are products of our social context. Our feminist interlocutors have indicated one point at which the techniques of maternal medicine ask humans to think of themselves in new ways, to act "naturally" in new ways. Women are no longer (as in past eras) mothers by choice and infertile by fate. A technical innovation and a concomitant set of social innovations have reversed and so redefined what is "natural" for humanity. For instance, it might once have been considered heroic, natural and loving to raise a handicapped child, but now medicine has helped to establish the social pressure which frowns upon a mother for not having "filtered out" this particular embryo.

Brent Waters helpfully schematizes the divisions which this new humanity "naturally" thinks as it instrumentalizes the intermediate stages of procreation. First, *childlessness* is turned into *infertility*, a medical condition that can be treated. Where once caring for disabled children might have been considered part of charity, now the focus shifts to preventing illness and suffering. Second, *sexual intercourse* is separated from

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[335] Bretherton and Stevenson, "Ambivalence and anxiety," 54.

[336] Naomi Pfeffer, "The Hidden Pathology of the Male Reproductive System," chap. in Homans, ed., The Sexual Politics of Reproduction.

[337] Wajcman, Feminism Confronts Technology, 57, 62, 67.

*marriage*. This is not unique to fertility treatments, but is endemic in a medical project and social context in which biological processes are compartmentalized and in which the ability to turn fertility off to "free" sex from it is an important aim. Third, *procreation* is shorn from *sexual intercourse*, becoming available to many combinations of 'parents' or individuals. Fourth, *parenthood* is separated from *procreation*, requiring a new set of designations such as "genetic mother" which are part of the shift in procreation away from a natural unfolding of a single marital relationship to perceiving it as a collection of tasks. Finally, *child rearing* is severed from *parenthood*. Parenthood, once an essentially passive cooperation with biological processes, now becomes a series of interventions aimed at quality control, lending pregnancy and parenthood a new provisional character.[338] Here, Heidegger and Foucault claim, is not just new practice, or new thought, but the initiation of a new form of humanity.

B. Felt Meaning and Decision-making

Not only is it important for our ten men to have a clear view of where their proposed technological artifact will fit into the wider contexts of social practices and trends, but it is also important to delve into the more personal aspects of the forces bearing upon those who deliberate about proposed technologies. We might speak here of why people might desire to use the new technology, or why its producers might want to develop and sell it, or the government promote it. This analysis will leave aside an explicit discussion of these other users in favor of a focus on forces acting upon the deliberation of the medical profession.

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[338] Brent Waters, Reproductive Technology: Towards a Theology of Procreative Stewardship (London: Darton, Longman and Todd, 2001), 14-18.

*Meaning and Technical Experience*

Feminist interpreters of reproductive technologies are especially concerned to open up one important region of moral investigation: "Given their low success rate, and the level of physical danger and psychological distress that accompany these new reproductive technologies, why the current concentration on in-vitro fertilization among infertility specialists? How does it happen that resources are allocated to this 'unsuccessful' technology?"[339] In her study of the rise of *in vitro* and embryo transfer techniques, Naomi Pfeffer argues that these techniques became highly attractive to physicians because they raised the treatment of infertility from its low status in the medical hierarchy to an exciting position in "frontier science."[340] Such techniques brought gynecology and infertility medicine into the "scientific age", which progressed in three stages from "direct communication with the patients' bodies through techniques of physical examination, to indirect connection with both the experience and bodies of their patients through machines and technical experts."[341] This technical change had the added benefit of validating the doctor's claims to know more about women than women do about themselves, while reducing the embarrassing discomfort of the physical examination of the female's body by the (almost exclusively) male physician. The power asymmetry between doctor and patient is thus maintained more effectively and on two levels, the level of knowledge and of practice, making daily practice easier and less prone to requiring negotiation.[342]

Pacey's analysis has again given us reason to expect that users of fertility technologies will like any technology that makes day-to-day tasks more interesting, more comfortable and less prone to produce conflict with others (in this case, patients). In addition, whereas once gynecology lacked much technical excitement, the introduction of new technologies generated a sense of technical rigor as well as a sense of the importance

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[339] Wajcman, Feminism Confronts Technology, 72.

[340] Pfeffer, "Artificial Insemination, In-vitro Fertilization and the Stigma of Infertility," in Stanworth, Reproductive Technologies, 88.

[341] Wajcman, Feminism Confronts Technology, 70.

[342] Wajcman, Feminism Confronts Technology, 69, 70-71.

of the work, again making the technologies attractive for reasons not necessarily connected with the welfare of patients.

*Meaning and Social Experience*

Within western medicine, Wajcman points out, high technology procedures not only enliven and ease the doctor-patient relationship, but are also key to the advancement of a sub-discipline within the profession. The development of new technologies signals success in the competition for scarce medical resources. Technological sophistication can mean everything for the status, money and professional acclaim of a sub-discipline because, says Fagerhaugh et al., "Medical specialization leads to technological innovation; then, as a given technology is used, physicians and industrial designers collaborate to improve it. As it is defined, that process leads to ever more specialization and associated work and procedures."[343] Naomi Pfeffer's study of British physicians argues that the introduction of IVF and embryo transfer brought substantial financial reward and job satisfaction by elevating gynecologists' status within the medical profession. This in turn led to pressure to subspecialization, calling for new technologies to be generated which could attract financial support for training and research.[344]

Again Pacey has outlined how new technologies can be attractive for reasons relating to the internal dynamics of social groups. He has suggested that technology can play a central role in the formation and rearrangement of the hierarchies of sub-groups, causing the work of technologists to become detached from a focus on the good of recipients and reattached to a self-referential system of social hierarchy within a discipline.

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[343] Wajcman, Feminism Confronts Technology, 71.

[344] Pfeffer, "Artificial Insemination," 88.

*Meaning and Political Experience*

Commentators have likened the biotechnology and fertility treatment boom to earlier technological booms such as computers and steam power. Feminist commentators point out the high risk of the commodification of human tissues and wombs that boom-time thinking and practice entails. They argue that such a technological boom can shift the focus of medicine from the care of patients to the maximization of new technology use and of profits.

[T]he centrality of the profit motive involves the exploitation of women/couples who are desperate to conceive and who will be prepared to incur major debts in the process. A further impact of the profitability of assisted reproductive technologies is the diversion of research, and practitioners' efforts, in this field. As in the case of other expensive medical procedures, the emphasis on treatment serves to divert attention, and resources, from investigation of the broader social and environmental causes of infertility; and hence from prevention.[345]

What is clear, Wajcman comments, "is that the needs of infertile women play only a small part in the research agenda envisaged. Embryos are a unique source of information about human genetics, embryonic development and foetal growth."[346]

Pacey and Nye have suggested ways in which feminists' queries of fertility medicine fit well with technology's role in a society in which startling and obvious "advances" and promises of such advances are used to build support for political power blocks, often to the detriment of other classes of individuals involved. In addition, they lead us to ask whether the new technologies associated with IVF and embryo transfer are not seen as "frontier science" by government elites who have been led to expect a windfall of financial and political gain on investment. At the same time, both they and scientific researchers benefit from the sense of being national heroes on the forefront of dizzying breakthroughs in human health. In such a context, it pays for both politicians and

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[345] Bretherton and Stevenson, "Ambivalence and anxiety," 54.

[346] Wajcman, Feminism Confronts Technology, 73.

scientists to promise much, invest much, focus on technical innovation and capitalize on public wonder at new possibilities which may or may not be realizable.

## Conclusion: To Make a Decision

It has been the contention of Part I that the technological habit can only be broken when our deliberation about specific technologies begins with the attempt to see technology as it really is. The discussion of a new ovum testing technology has allowed us to make clear that it is important to deploy at least three lines of questioning in order to expose the actual implications of our decisions about new technology. We must think about tactical relationships between competing entities and the welfare of the social grouping for whom we are responsible, as TA indicates. We must consider our social context as a whole, and whether our proposed action produces justice or injustice amidst a contemporary social climate. And we must ask if we and other users will be inordinately attracted to the technology on self-interested grounds. Each line of questioning develops the observant eye upon which well-developed moral sensitivity depends. It is important to recognize that Heidegger's attempt to bring different types of *inexplicit* knowledge to light destabilizes in salutary ways the mechanical moral method of TA which so easily promotes injustice in the guise of "rationality."

In the case of our ovum-testing machine, it has become troublingly apparent that any properly nuanced moral theory, whether philosophical or theological, must be able to respond to the realization that the needs of women and children constitutes only a small portion of the medical agenda within which the technology would find its place. As we will see, the importance of these three lines of questioning can only be established on other grounds, in this case, theological. Furthermore, by establishing the importance of these questions on theological grounds, the way we go about deliberation is decisively reshaped. Yet these three regions of questions raised by Heidegger, his interpreters, and the thinkers of TA, *are* important, and will remain at the focus of our inquiry. The difference this shift makes will become apparent when we return to discuss fertility and maternal medicine at the end of chapter five.

# PART II: POSITIVE THEOLOGY

# Chapter Four: Bernd Wannenwetsch on Being Remade in the Community of Worship

> ...the center of theological ethics is the affirmation that the word of God is going to make something of man.
>
> Stanley Hauerwas[347]

Part I has argued that an important part of resisting the technological ethic will be the making explicit and subjecting to judgment both our conscious and unconscious knowledge. Part II will develop a proposal about how humans caught up in unconscious desires and urges which lead to technological determinism can be empowered to deliberate as responsible actors. We have also seen throughout Part I that we must avoid replacing a technological decision-making method with a similar but "theological" one. We have seen that the *problem* is method and thus Part II, in order to meet the challenge of Part I, will not set up moral rules and announce eternal prescriptions: it aims only to ask "How can we more faithfully and insightfully deliberate about the choices we make, given our misdirected desires and misinformed reason?"

The burden of this chapter is to establish how God might break into this confusion of motives and forces which determine the course of our existence and resurrect us as new, free, creations. Its first section will expound Dietrich Bonhoeffer's thought in order to outline the theological premises upon which Part II is based. A second section begins the body of the chapter in which an exposition of the thought of Bernd Wannenwetsch indicates how the practices of worship are essential to a Christian understanding of God's transformation of humanity. Wannenwetsch argues that because God has reconciled humans to Himself, He has also committed Himself to their renewal through the life of

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[347] Stanley Hauerwas, Character and the Christian Life: A Study in Theological Ethics (Notre Dame: University of Notre Dame Press, 1994), 139.

the Christian community. The form of life in which the church exists in salvation history, reconciliation, is also the medium through which it is transformed and generates new knowledge, i.e., by practicing and developing in the logic of reconciliation. Chapter six will return to the theme of the relation between divine and human reconciliation, which will also be central to the argument of this chapter with its focus on the transformative potential of human reconciliation.

This chapter concludes with a third section in which Wannenwetsch's understanding of the transformative potential of the church's practices of worship are linked with practical issues of political governance which, unlike the manipulative political technologies outlined by Foucault, encourage responsive, reciprocal and morally engaged political action. I understand Wannenwetsch to establish that the relations of the worshipping community are an essential part of the divine transformation of human living, which, in the first instance, issue in clear priorities for understanding and deliberating about our lives as political agents.

Bonhoeffer's discussion of the foundations of Christian moral theory, which grounds the thought of Part II, explains that Jesus Christ claims his people through the orders of 1) social and 2) material life.[348] The next two chapters circle around and are united by this claim, and inquire about these forms and how they might guide Christian living. In this chapter, Wannenwetsch wrestles with Bonhoeffer's understanding of the 1) social forms of life which guide Christian living. In the following chapter I will examine Barth's wrestling with the way the order of 2) material life guides Christian living.

Chapter six completes the analysis of Part II by trying to sketch at a more general level the continuities which bind chapters four and five together. In doing so, via the thought of Augustine and Barth about the two cities, a more general theoretical background will be developed in order to give a sense of how our technological action takes place within God's larger struggle to reclaim humanity from the power of sin. The three chapters of Part II work together to develop a single analysis, and their order here ought not be interpreted as one of logical priority.

## *What is Moral Theology? Christ at the Center*

This study assumes, and will shortly argue, that Christian reflection about human action aims at the development of human freedom. If humans are to be truly free then we cannot expect human reflection about good action to have any independent authority over other humans: it can only point to true divine authority, with whom to walk in free companionship is the fulfillment of human life. This statement is at once a claim about both the proper form of moral theology and about free human action. Christian moral theology, as reflection on free human action, consists in a form of deliberation about God and His ways which aims at delivering over to humans a new attentiveness to God and His creation.

Preceding the material content of Part II, this first section of the chapter provides a preliminary outline of its theological groundwork. This section attempts to indicate what moral theology is and what authority a Christian moral theologian might claim. The larger theological cosmology to which this discussion is related will continue in chapter six.

Following the thought of Karl Barth and Dietrich Bonhoeffer, I contend that the only way Christian moral theology can respond to the full range of issues raised in Part I is to begin from the simple poverty of a declaration of our reliance, not on a set of formal principles or general observations, but on the living lordship of Jesus Christ.[349] Only by beginning from such an affirmation are we freed from the idealist temptation to construe moral theology as the working out of an idea which contains all truth, so Barth explains.

> That the nature of the command of God is spiritual means that it does not confront us as an ideal…but as the reality fulfilled in the person of Jesus Christ. This person as such is not only the ground and content but also the form of the divine claim. And it is in this person and only in Him that the identity of authority and freedom is accomplished. Deriving from this person, in His

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[348] Bonhoeffer, "The Concrete Demand and the Divine Mandates," chapter seven in Ethics.

[349] Karl Barth, Church Dogmatics II, The Doctrine of God: Part 2, trans. G. W. Bromiley, J. C. Campbell, Iain Wilson, J. Strathearn McNab, Harold Knight, and R. A. Stewart, ed. G. W. Bromiley and T. F. Torrance (Edinburgh: T& T Clark, 1957), 665-667.

relationship to us and in our relationship to Him, this identity becomes normative for what is demanded of us.[350]

Understood this way, faithful, free human action is marked by the presence of moral thought which chooses its paths based not only on what is already assumed to be known, but leaves an important place open for learning through "hearing and obeying."[351]

In what amounts to a commentary on this section of the Church Dogmatics,[352] Bonhoeffer conceives Christian moral theology as the search for transformation by humans caught up in the rich and ambiguous mix of human motives and desires. Most moral theory, Bonhoeffer says, tries to construct a moral system on the basis of an idea (a project which he calls 'ethics'), and

> …is repelled and horrified by the obscurity of the motives for action, by the way in which every deed is compounded of conscious and unconscious elements, natural and supernatural elements, inclination and duty, egotism and altruism, volition and compulsion, activity and passivity, so that all active doing is at the same time passive undergoing and *vice versa.* In all circumstances the 'ethical' demands clarity, directness, purity and consciousness in human motives and deeds. It cuts any knotty growth in life. The commandment of God permits man to be man before God. It allows the flood of life to flow freely.[353]

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[350] Barth, Church Dogmatics, II.2, 606. Barth can later restate the claim that Jesus Christ is the one word of God claiming and judging all other words and realities, saying, "we have here the irresistible and relentless outworking of the 'thou shalt have no other gods but me' of Exodus 20:3." See Barth, Church Dogmatics IV, The Doctrine of Reconciliation: Part 3.1, trans. G. W. Bromiley, ed. G. W. Bromiley and T. F. Torrance (Edinburgh: T & T Clard, 1961), 101, cf. discussion 86ff.

[351] Barth, Church Dogmatics, II.2, 673.

[352] Dietrich Bonhoeffer, A Testament to Freedom: The Essential Writings of Dietrich Bonhoeffer, ed. Geffrey B. Kelly and F. Burton Nelson (San Francisco: Harper Collins Publishers, 1990), 358: "In Barth's Church Dogmatics, II.2, Bonhoeffer seems to have found not only the missing link to his previous arguments on behalf of individual and corporate responsibility in the age of Nazi immorality and chaos but also a better expression of the underlying foundation of ethics."

[353] Dietrich Bonhoeffer, Ethics, ed. Eberhard Bethge, trans. [from German] Neville Horton Smith (London: SCM Press, Ltd., 1955), 249-250.

Clearly Bonhoeffer, like this thesis, is concerned to develop a Christian ethic which takes seriously all the ambiguities of concrete, everyday life. In order to do so, Bonhoeffer argues, it is essential that our conception of moral deliberation not be focused on "decisions" in which we must choose between good and evil. Certainly we must make such decisions, but proper Christian moral deliberation has a much wider field of inquiry in which explicit decisions are addressed, but which Bonhoeffer can boldly call "peripheral events."[354]

The implication, Bonhoeffer continues, is that Christian moral theology foregoes the project of developing rational schemas from which "shall's" and "should's" can be pronounced on any conceivable situation in an attempt at systematic completeness. More properly, Christian moral deliberation must aim to develop a responsiveness to the disruptions of life in which our frailty, limitations and brokenness open up and become visible to us. As we wrestle with such brokenness, we must of course deliberate about shall and should, and insights which are gleaned from such wrestling persists to shape us long after discussion of the specific disruption has faded from our explicit awareness. As each of the writers of Part I have made clear, the technological life of contemporary humanity brings before us just such a disruption and is thus a particularly salient forum in which to wrestle with the implications of our belief in the living Jesus Christ.

On Bonhoeffer's understanding, the task of moral theologians is to provide tools for people facing these moments of wrestling with human brokenness. This bars theologians from disrupting the flow of life by constantly acting as spectators, critics or judges of life in the attempt to make the shall and should which impinge on life at its periphery a constant theme for all moral deliberation. Instead of fostering the self-suspicion such interventions breed, they are in the business of being aware of the shall and should, but only in the service of urging the free acceptance of the fullness of life to which these negative limits point.[355] Christian moral imagination finds its true *modus*

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[354] Bonhoeffer, Ethics, 232-233.

[355] Bonhoeffer, Ethics, 237.

*vivendi* in asking about good, rather than constantly ruminating on the *limits* of the good. We will return to this important theme in the opening pages of chapter six.

To use the term "Christian moral theologian" is not an attempt to establish the authority of the "expert" which has been critiqued in Part I. Such a foundation for authority would imply the mastery of "systematic construction and metaphysical deduction," both of which, says Bonhoeffer, "lead to inertness in real life."[356] Expert-layperson relationships atomize society by making it nothing more than an aggregation of individuals living out their duties to one another, Bonhoeffer says, and thus the moral theologian is not to be understood as a possessor of esoteric knowledge which laypeople need to live obedient lives. In Christian thought all authority over human action is held by the giver of commands, who is in concrete day-to-day relation with the receivers of those commands. The ethical sphere, and those who try to think at more length about it, represent therefore only one part of God's leading and claiming of His children.[357]

This claim of God on the action of believers, Bonhoeffer emphasizes, is always concrete in time and place. God speaks today as He spoke to Abraham, Jacob, the apostles and disciples, which means He speaks in diverse ways. What God said completely and sufficiently in Jesus Christ He continues to make relevant in our present through historical, created mouthpieces. The essential supremacy of God's speaking becomes evident in His leading His people by juxtaposing and coordinating the many created forms and human words through which He speaks, a theme to which chapter six will return.[358]

Life within the claim of the commanding God, Bonhoeffer argues, entails an acceptance of certain institutions and orders as holy which confront and claim me in a not entirely quantifiable manner amidst the fullness and messiness of my daily life. In this way the claim of God through these orders, which at first we can only recognize in a rather broad and general sense, is understood not as a list of rules but as an atmosphere in which one moves without needing to be constantly conscious of it, even as it stands ready

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[356] Bonhoeffer, Ethics, 243.

[357] Bonhoeffer, Ethics, 240-244.

[358] Bonhoeffer, Ethics, 245-246.

to provide guidance in times of perplexity. This understanding of God's claim as all-encompassing releases Christians from fixation on rules and "implies certainty, quietude, confidence, balance and peace."[359] Such a command is a permission to live as a true human being before God. "It differs from all human laws in that it commands freedom. It is by overcoming this contradiction that it shows itself to be God's commandment; the impossible becomes possible, and that which lies beyond the range of what can be commanded, liberty, is the true object of this commandment.[360] This chapter will examine what can be gleaned from this "atmosphere" at the level of its social aspects, while the next will ask what can be learned from its material aspects.

As Bonhoeffer and this thesis define it, moral theology, as an explicit discourse, is only faithful as it keeps two priorities firmly in view. It must be devoted to indicating the positive content of the life made possible through Jesus Christ, and committed to serving the embodiment of this liberty of each person before God.[361] The achievement of communion with God is upheld as the center of the fullness of human life: Christian moral theology can only teach us the act of hearing His voice.[362] This means that the discussion of practical questions in Part II will not issue in pronouncements about "the" Christian course of action, but will attempt to argue that the work of Christ means that truly free deliberation about particular topics will attempt to do justice to the orders of grace provided to guide human life into wholeness.

This definition of the task of moral theology will ground the remainder of the discussion in Part II, and has a range of implications for the topic of technology, of which two are immediately relevant. First, because Christian life is constituted by loyalty to a person rather than a principle, principles from both "secular" and "Christian" thought can be weighed for their congruence with the Christ event. Thus Part II will evaluate and

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[359] Bonhoeffer, Ethics, 247.

[360] Bonhoeffer, Ethics, 248.

[361] Bonhoeffer, Ethics, 251.

[362] Karl Barth, The Christian Life: Church Dogmatics IV.4 Lecture Fragments, trans. Geoffrey W. Bromiley (Edinburgh: T & T Clark, 1981), 33-34.

employ the arguments derived from an exegesis of Heidegger and his interpreters in Part I.

Second, because Christian moral deliberation is not tied to any formal principle, human action and thought remain open to experimentation and revision, bound only by fidelity to the Redeemer. What we ask about at root is how God reconciles man to Himself and how we may participate willingly in that reconciliation, about which Barth can say, "Here in the doctrine of reconciliation, as in general also ethically, we stand before the center, the source of all the reality and revelation of God and man—Jesus Christ, who is not only the ontic but also the noetic basis of the whole of the Christian truth and the Christian message."[363] The question is, what are the orders in which Bonhoeffer says we hear God's speaking in order to learn the freedom of action promised to humanity in Christ?

***Beyond Reactionism***

It is Sunday morning and bells are ringing in a prominent building with a skyward pointing spire. This ringing marks an interruption of the habits of the working week as people leave their daily routine to gather in this building also marked out by its open doors closed to none and a large central room in which all sit together. A ritual begins in which God is spoken to as Thou, a speaking punctuated by singing and kneeling. The great deeds of God are proclaimed and requests are made of Him. The group undertakes the collective action of a ritualized eating and drinking ceremony which contains within it moments of individual initiative. As it concludes, the gathering disperses, returning its participants to the time and space of daily life. This is the physical, embodied, practical form of the body of Christ.

The boardroom, shop floor, and worship service are each contexts in which our being is questioned and to which our actions give answers, yet in the actions of the worship service worshippers learn that they are questioned in a special way by God.

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[363] Barth, The Christian Life, 9.

Because God is generating a distinctive people, in the distinctive practices of worship we first glimpse the possibility that in the life of the church secular patterns of life are being critiqued, reformed, and often completely displaced.

This second section of the chapter follows the thought of Bernd Wannenwetsch, who develops a nuanced definition of how the social life of the church is an order of grace in which sinful humans are given the resources to understand their own brokenness and come to inhabit their own redemption. In this chapter's last section I will attempt to show how this view of the transformative potential of worship might displace habits of political relations learned in technological society, but any such displacement depends on there being a real transformation taking place in Christian life. This second section of the chapter will be devoted to explicating how this transformation of social life is related to worship.

It is just this attempt to study the generative power of worship that most Christian political ethics ignore. Responding to a theological climate prone to reactionism about the pernicious and pervasive effects of the Constantinian settlement,[364] Wannenwetsch points out that many contemporary attempts to speak about renewal of Christian political life breed political pessimism by assuming Christians can be nothing more than protesters against their society. Wannenwetsch will argue that the church's worship only interrupts the course of the world as its participants learn and relearn to renounce destructive and selfish violence under the claim and tutelage of the Spirit.[365]

Such an understanding of the source of the church's political power is based on a twofold contention, says Wannenwetsch. First, the church has power not because it *interprets* the Gospel for society, but because it is *itself* a hermeneutic of the Gospel. This means that its political engagement with society does not properly begin with the announcement of a political ideal, but springs from its distinctive political participation

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[364] The claim that the church must *always* be the church of the protester and outsider finds a clear and recent articulation in a volume of responses to Oliver O'Donovan's Desire of the Nations in Studies in Christian Ethics 11:2 (1998).

[365] Bernd Wannenwetsch, Gottesdienst als Lebensform, trans. [from German] Margaret Kohl (Stuttgart: Kohlhamer, 1997), 188, 205.

and confrontation of the political habits of society. Wannenwetsch even goes so far as to say that a church which knows that its own political life speaks volumes will not try to assuage a sense of political unimportance by pronouncing ideal blueprints for society.[366]

This is not to imply that Christians worship *in order* to be good citizens, Wannenwetsch hastens to add. For the Christian, formal practices of worship are ends in themselves, not means to other ends. Yet such practices do not repudiate the sphere of necessity and the bodily but incorporates and situates it as dependent on a living heart of intercession and worship. On this view the political power of worship is located in its possibility for overcoming the antinomy between freedom and necessity. The illusion is widespread that worship is an optional addition to the more basic forms of secular political and economic life. But, Wannenwetsch says, worship is *the* central human act because making explicit the core of the life in faith, and thus its practice represents an alternative to the partitioning and polarization of freedom and necessity, even while taking up the truth of each concept.[367]

Wannenwetsch's foundational assertion is that the worship of the Christian church is a *happening* which is an elemental presupposition of a Christian understanding of freedom in political life. All of the necessary activities of life, our feeding and sheltering activities are here set into explicit and visible relation with the kingdom of God, even as that kingdom is remade in invisible and inexplicit ways which they cannot grasp. The public and private realms of political life are in this transaction each given back their proper dignity which is destroyed when their center in worship is lost by allowing one sphere or the other to be totalized. In worship the good things of political and economic

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[366] Wannenwetsch, Gottesdienst, 166-67, 187. Wannenwetsch's discussion of the practice of stational liturgies by the early Constantinian church which took possession of the city's spaces because acting on the belief that the presence of the church sanctified the city is an illuminating critique of modern forms of church political engagement. Neither the stabilizing nor destabilizing effects of this early church behavior went unnoticed by the Roman rulers (428-431).

[367] Wannenwetsch, Gottesdienst, 302.

life also find their place, their proper relation.[368] How then does Wannenwetsch understand this transformation to take place?

### *The New Community's Transformation as Politically Generative*

Part I brought into focus the central role of several destructive antinomies of thought, the most important having been indicated by Heidegger; the vacillation of attempts to "get technology under control" between two equally inadequate conceptualizations. Heidegger was able to expose the vacuity of this polarity by critiquing it, but ultimately was only able to hold this critique open by divinizing the earth. His critique reveals, however, that to sustain critiques of such polarities demands they be confronted by another absolute priority. Heidegger does so by making reference to holy earth, but Wannenwetsch contends that the properly Christian priority is discipleship of Jesus Christ for the sake of the kingdom of God. In the face of the practices of such discipleship, the obligations imposed by life in the worldly political economy may be relativised without disparaging these spheres of life in principle. The new citizenship of the kingdom brings in its train not an erasure of, or extraction from, the daily patterns and practices of life, but an awareness of a new possibility regarding their relations.[369]

The radical newness of this possibility is marked, Wannenwetsch argues, by the New Testament writers' struggles to name the Christian community's distinctive way of being. The term *ecclesia*, taken from contemporary Roman political life, was used by the New Testament writers to designate the political side of the life of the worshipping community, while also gesturing toward that inner form of their existence which made them different as those "called out" from other representatives of the same concept. The search to characterize this perceived difference of the Christian community's self-awareness is further indicated by the rich overlapping tapestry of other self-descriptive terms. They saw themselves as a city set on a hill, within which they were citizens, even

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[368] Wannenwetsch, Gottesdienst, 303.

[369] Wannenwetsch, Gottesdienst, 217, 224.

as they called themselves resident aliens. By examining the overlap of the different terms, we see that the uniqueness of the church's form of life emerging precisely in their notation of similarities with other disparate social groupings bearing the same individual names. The peculiarity of this self-designation was such that to be granted full citizenship in this *ecclesia* could not but relativise the believer's ties with all political, economic, and ethnic systems which claimed to be *the* basic social grouping.[370]

Wannenwetsch continues that any religious group understanding itself as such a self-contained political community was bound to be subversive of other schemas of political division, as Augustine so clearly saw and elucidated in his City of God. Because the political existence of Rome was fundamentally flawed by its reliance on pride and rapacious desire, Augustine said, the rise of the church was dangerous precisely by calling into question the Roman empire's explicit reliance on practices of violence and political disenfranchisement. Wannenwetsch fleshes out Augustine's insight by saying that within such a political background the church's practices of baptism and eucharistic celebration provided the experience of reconciliation of the hitherto unreconcilable which undermined the social divisions of Rome. This experience of reconciliation distinguished the structure of Christian worship from the beginning, and gave it its unique shape as the community marked by God's reconciliation of the world.[371]

In the example of the New Testament church, Wannenwetsch sees a growing recognition of the logic of God's reconciliation. Because this disparate aggregation of formerly separated brethren is gathered into the one body, they began to see that to be reconciled in Christ is to be equally opposed to the resolution of conflict by violence and to the resolution of the Christian community's internal conflicts by recourse to secular law courts. Instead, the reconciliation of Christian worship came to be understood as a unique form of life whose inner logic cohered with God's work. The church's special "political character means that the form of life in which it exists in salvation history—i.e. reconciliation—is also the *medium* through which it solves conflicts."[372] The New

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[370] Wannenwetsch, Gottesdienst, 226-232.

[371] Wannenwetsch, Gottesdienst, 237-38.

[372] Wannenwetsch, Gottesdienst, 252.

Testament church came to see that God's reconciliation and the reconciliation of the church are not two processes. To receive God's reconciliation in communion is truly accomplished only as those reconciled to one another.

The transformation worship brings begins with the Spirit's creation of a will to worship, says Wannenwetsch. The renewal of human judgment within worship is irreducibly linked to the Spirit's prior work of making possible the self-identification of the individual with the community of worship. The way this identification then functions to bring illumination is not through "direct inspiration, or analytical, through the application of a theory, but indirect: through the experience of what is good, well pleasing and perfect as this is promised and present in worship." The practice of baptism makes explicit the passage from the sway of the powers of the world into the worshipping community. Yet inside this community all is radically new and unfamiliar. Learning the life form of worship is like learning a foreign language, which entails partially unlearning the familiar ways of our native tongue. Because such transformation is the basis of the church's existence, we must also understand that the ethos of the life of the worshipping community cannot be translated back across into the logic of the "old man."[373]

Comparing the transformation begun at baptism to a change in language is not to imply that we simply take up a new language game with baptism as we might the lingo of a new hobby, continues Wannenwetsch. The change in language is part of the identification with a community and the concomitant transformation of practice which underlies it. The practice of worship is thus irreducible as the language school of faith. The identifying marks that the Spirit imparts (the gifts of the Spirit) are learned not from texts but from participation in the Christian community as it is shaped by the law of the Spirit. This law finds its heart in worship, where the Spirit is promised to be experienced, where we "taste and see" God's works. This experience of God's reconciling work

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[373] Wannenwetsch, Gottesdienst, 54-55. We must emphasize that Wannenwetsch is not saying that the Spirit works *only* in the context of the communal relations of the church, but is indicating that the community is *where* the Spirit draws people so that they may be remade in the course of their all too human relations with this community to which they have been so led.

provides the raw material for the intellectual work (theological and ethical) of the body.[374]

Here Wannenwetsch is in implicit dialogue with a rich tradition of reflection about how worship shapes Christian action. Bonhoeffer, for instance, argues that Christians are transformed within the life of the church by preaching and church discipline.[375] Barth is dissatisfied with this focus and adds explicit discussions of the importance of prayer and the Lord's supper for ethical life.[376] Stanley Hauerwas has systematically elaborated this way of understanding the transformative aspect of worship,[377] but Wannenwetsch is contending that the life of the worshipping community is transformative of Christians not only in these moments but in the whole range of the reconciling and worshipping of the Christian community.

While the experience of the reconciling and transforming work of the Spirit is the generative source of Christian transformation, Wannenwetsch warns that we must be careful not to take an instrumental view of the Spirit. Neither the worship service nor preaching can force the Spirit's appearance. It is the Spirit that makes the word and service alive, applying them to the congregation as He will. Thus, all human possibility is concentrated on waiting for the Spirit. The free work of the Spirit is the primal source, the lifeblood of the community whose power is found in participating in its own transformation. We thus explore worship not as a "foundation" for Christian moral theory, but as a heuristic taken to be the beginning of moral deliberation because it is the beginning of God's work in the world.[378] This formulation can be understood as a further specification of Barth's contention that even if we speak formally in the order of salvation

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[374] Wannenwetsch, Gottesdienst, 57, 96, 112, 148-49.

[375] Bonhoeffer, Ethics, 258ff.

[376] Barth, The Christian Life, paragraph 74.

[377] Stanley Hauerwas, "The Liturgical Shape of the Christian Life: Teaching Ethics as Worship," chapter ten in In Good Company: The Church as Polis (Notre Dame: University of Notre Dame Press, 1995).

[378] Wannenwetsch, Gottesdienst, 97.

history, materially there is an order of rank within doctrine based on reconciliation being the first moment of Christian existence.[379]

According to Wannenwetsch, Christian moral theology can only begin from within the *practical life* of the reconciled community, within which reflection about its proper shape is a proper, but less basic component. This demands that all Christian moral deliberation begin from the realization it has been taught that "to listen afresh is something for which there is no substitute."[380] Having given this priority to listening, Christian moral theory is firmly situated as a reflection on this practice of submitting to the ongoing judgment of God, a submission which in turn forms our own judging processes.

On Wannenwetsch's argument, then, the Christian response to technological life should not begin from an ideal picture of what worship and thus political life should be, but from participation in the actual practices of the church. By being included in this practice we discover the form of the body which is ruled by its Head through the law of the Spirit. Traditional theological terminology can help to light up facets of the social experience of the body and does play an appropriate role insofar as it makes explicit to its participants the living processes of God's transformation of His people through worship, enabling them to be more faithful participants in this empowerment. Beginning moral deliberation from a priority on listening and communal reconciliation retains for ethical deliberation the pluriform interrelatedness of worship and politics by refusing to encapsulate them in another foreign and reductive concept or metaphor. This is not to leave the relation completely without any guiding landmarks, but to insist that all political life is under only one illuminative rule: human political life finds its fulfillment in "the law of the Spirit of life in Jesus Christ" which has "set you free from the law of death" (Rom. 8:2).[381]

This rooting of the political power of the church in the transformative power of the Spirit's rule, Wannenwetsch says, does not discard other authorities in the Christian

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[379] Barth, The Christian Life, 9-11.

[380] Wannenwetsch, Gottesdienst, 8.

[381] Wannenwetsch, Gottesdienst, 12-17.

community. Though the life form of worship is regulated by the Spirit, this regulation is through, and in coherence with, the canon of scripture because the rule of the Spirit is enfleshed and understood in the body's interaction with scripture. Having outlined Wittgenstein's argument that agreements in judgments about practices are implicit in agreements about language, Wannenwetsch clarifies the regulative role of scripture within the community of faith:

> [T]he canon is to worship as a grammar is to a form of life. In both cases the telos of the first is at home in the second. Strictly speaking, grammar exists only in and for forms of life. But at the same time the grammar ensures not only that the life has form, but that the form has life. That is to say, just because of its regulating character it also makes something new possible, by making the new recognizable in a given context of linguistic communication—born out of the continuity which it both transcends and extends in substantially expanded form. The same can be said about the canon. On the one hand, as canon it is formed in worship and formed for use in worship…But at the same time worship is regulated by the canon: what is to be celebrated in worship is given us in the canon.[382]

If the social life of the worshipping community is going to find its peculiar form, it does so as it is in dialogue with the rule of scripture. This means that,

> Worship is not in itself and *directly* the rule for the community's moral life; it governs the moral life as *the first instance*, so to speak, of the rule's application. If the social life of believers is to find its form in relation to this rule, it does so first of all in worship. For it is there that the primary modes of the common life can be found—as fellowship at the Lord's table, in shared listening and speaking in assent to the Word; it is also the place where the canonical texts find their direct expression; and it is these which mediate the rule to us. So in what sense is worship

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[382] Wannenwetsch, Gottesdienst, 49.

itself regulative? Here the answer has to be: simply as the rule's first application—its first, continually necessary first application—its beginning.[383]

By understanding the forces shaping the community in this way, Wannenwetsch contends that moral theology is founded neither in worship alone, nor in the canon alone, but is a disciplined reflection taking place in the interaction between the two under the guidance of the Spirit. This is to insist on keeping the pluriform relations of the worshipping community open as an ethical source by holding ecclesiology and pneumatology together to note the richness available in their mutual interpretation. "Worship", then, is defined as this formed activity of the Spirit in the church.[384]

Such a definition of the foundations of Christian ethical knowledge refuses to adopt either alternative in the idealist-empiricist squabble illustrated by the different approaches to technology depicted in Part I, and is therefore critical in situating the foundations of the theology of Part II. What Christian worship values is what God *is* doing with His church. This means that for the purposes of this study I must affirm the ethical relevance of worship not as it conforms to one or another ideal, but as it is currently taking place. Wannenwetsch says that to do so is to perceive the actual occurrence of worship through God's promise rather than through our human perception of its current state. There is a hidden reality in the life of the church which restrains our thirst to define and possess it through precise and completely inclusive definitions.[385]

If Christian moral deliberation is oriented through the exploration of the dynamic and pluriform life of the community which God is reconciling to Himself and to one another, Wannenwetsch continues, then the task of moral theology is the dynamic intellectual reconstruction of the change which every encounter between the congregation and God brings. Theology must not *itself* be conceived as the basis of Christian life and

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[383] Wannenwetsch, Gottesdienst, 50. Again, Wannenwetsch is not ruling out the Spirit's work outside this framework, but is pointing to the heart or central node anchoring human knowledge of who this Spirit is: the church which is baptized in the name of the Father, Son and Holy Ghost.

[384] Wannenwetsch, Gottesdienst, 51, 94.

[385] Wannenwetsch, Gottesdienst, 104.

behavior, because when it does, prayer, belief and life itself are replaced as the font of the community's transformation by the reductive category "correct belief"(or, in Bonhoeffer's terms, "ethics" as idea). This is not, however, to take up the empiricist position and understand theology as somehow second-order: it is simply an integral part of the life of worship which must retain space for serious academic study.[386]

In the same way that the scripture/Spirit, pneumatology/ecclesiology, and experience/reflection categories must be understood in their unity, so too must the unity of politics and worship be appreciated, continues Wannenwetsch. When theology and worship are perceived as *different* spheres, they are inevitably conceived in the typical pattern which considers the *effect* of one sphere on the other. The upshot is that political freedom can only be perceived as an effect of worship. Drawing on the thought of Luther, Wannenwetsch points out that integral to the transformation of the community of reconciliation is the drawing together of political and economic life as the field in which the church's love proves itself. This reconciliation of the political and economic is not an "application" of the insights of worship: worship is political and non-political in specific ways. It is non-political in detotalizing politics by saying that all humanity exists under one ruler, and all human authority is therefore a representative of this authority. In this sense worship is pre-political because it is the *condition* for politics. But it is political in creating something outside, distinguished from itself—secular economics and politics in which Christians enact their Christianity but which they insist is other than the church.[387]

The question which must now be addressed is, in what ways are the way of life known in worship at odds with those political practices which are coherent with the technological metaphysic? Having argued that the church's moral reflection is grounded in its life with God and the church, this second section moves now to outline how the ordered social life of the church might be understood as containing insights about the proper functioning of wider political society.

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[386] Wannenwetsch, Gottesdienst, 118-120.

[387] Wannenwetsch, Gottesdienst, 122, 92-93.

***Political Life: Members of One Another, Romans 12:1-8***

Wannenwetsch has prepared the ground to argue that the church's reflections on the proper shape of secular political power grow from its reflections on its own way of being, a sentiment with which Oliver O'Donovan concurs. "A theological account of how this world is ruled, then, must proceed from and through an account of the church…Decisions made about the nature of church authority have shaped and still shape what is said about secular government."[388] In his " 'Members of one another': *Charis*, Ministry and Representation, A Political Reading of Romans 12," Wannenwetsch takes the church seriously as a *governed* society which is at the same time eschatologically open, and still exploring its own being. It is a society formed according to the "law of the spirit of Christ" (Romans 8:2) and keeping the bond of peace (Ephesians 4). "As the church learns to understand and describe its own life politically, it offers the world an opportunity to rethink its dominant conceptualizations of the political life, and the hope that it may readjust its practices in a way which is less caught up in narrow frameworks and unfruitful alternatives."[389] The church's glory, contends Wannenwetsch is not the possession of a superior "image" toward which it strives, nor an "ontology" out of which it expresses itself,[390] but is found in practical exploration of the political conceptualizations to which it has been directed by revelation. This exploration assumes a willingness to admit the existence of the powers of this age. "In order to be able to witness to the worldly city with *transforming* power, the church must acknowledge the *formative* power of the dominant patterns of reaction within the worldly city. Though Christ has deprived this power of rule, the schemata are nevertheless still powerful, and

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[388] Oliver O'Donovan, The Desire of the Nations: Rediscovering the Roots of Political Theology (Cambridge: Cambridge University Press, 1996), 159.

[389] Bernd Wannenwetsch, "Members of One Another": *Charis*, Ministry and Representation. A politico-ecclesial reading of Romans 12, unpublished author's manuscript (Oxford University, 2001), 1.

[390] A counter to Milbank's ontological "harmonic peace." See John Milbank, Theology and Social Theory (Oxford: Blackwell, 1990), chapter 12.

the new understanding and practice of political authority within the Church must be formulated over against these conceptualizations…"[391]

In the description of the church Wannenwetsch developed in the first part of this section, part of its social organization included the address of the whole community by a single individual. Wannenwetsch contends that the form of this address exposes the order of grace which gives shape to redeemed human social existence. Drawing on the famous "body life" passage of Romans 12, Wannenwetsch notes that in speaking to the church Paul addresses himself to a corporate "we", not a collection of individuals. This is characteristic Pauline speech, implying that in the church the authority of speech is not based on any appeal to supposed superiority possessed by the speaker which claims the attention of monadic individuals, but draws its authority from the status that the speaker and addressees share as "brothers." This implies that the Christian understanding of political authority is not derived from an ideal yet to be realized; authoritative speech is a summons to the whole community to explore the communal reality which they already participate in and which *itself* is authoritative, as the embodiment of God's reconciling action with which they have been identified by the Spirit.

The kind of exhortation that "*parakalein*" denotes, mirrors the particular address ("brothers"), which is in itself an appeal to a reality (the brotherhood of the children of God) that embodies an inherent moral imperative. And it seems that the detailed exhortation that follows is merely specifying the imperative inherent in the invoked reality. Thus, the appeal is not directed to "moral subjects" as a summons to realize what is not yet real or not yet fully there; rather the appeal is to a given reality.[392]

The political life of the church as portrayed in this passage begins in its members' trusting that they are indeed participants in this body, created as a body by God's dissolution of the power of the former antagonisms of public and private, slave and free, by which they

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[391] Wannenwetsch, "Members," 2.

[392] Wannenwetsch, "Members," 4.

once were separated, and which we saw in their entry through the church's open doors and their sitting together.

According to Wannenwetsch, political authority understood in this way is "leveled" precisely because its claim to authority is made from within a society of fellows. Such a construal of authority forbids any actor to claim to be more valuable than others, as all stand equally under the authority of the gospel. Given this radical equality (which is to be strictly distinguished from egalitarianism because it admits many differences but refuses political hierarchy), how can Paul repeatedly write as if he expects obedience to his exhortations? On what basis does he expect obedience if not he, but the community itself, is the authority over each actor? These questions bring us to the crucial theological question: If the sole authority of the church is the household of God itself and the authority of Christ in whom the body has life, how is this authority properly represented in the church? By analyzing the structure of Paul's exhortations we see that it is his appeal to the mercies of God, which constitute the church, that gives his exhortations the force of authority.

Paul's form of authority claim contains two important political implications, Wannenwetsch indicates. First, as part of its claim to authority Paul's speech is submitted to be judged by the moral claim of divine mercy. Second, within the church, authority figures need not themselves be concerned about establishing the divine legitimization of their own temporal authority. "The nature of this political language is intelligible only in a community for which "authority" is never a monolithic concept—a community, which is less concerned with divine legitimization of temporal authority but with human *mediation* of divine authority."[393] Churchly authority does not therefore deliver from on high abstractly referenced inner promptings, but continually takes its reference from the public and historical work of God. Such authority listens for God's prompting while it attends to the state of God's people.

Such a conception of authority assumes that the political society of the church is sustained by its members' participating in the living sacrifice which is corporate life in the body of Christ, Wannenwetsch continues. This is the very bodily "spiritual worship"

to which Paul exhorts the Romans. Such worship is not a mystical union, but a concrete, practical, communal affair. Because our bodies are the medium of our communion and communication, to sustain this one social body demands the continual giving over of many believers' bodies. In handing the medium of human communion, the individual body, over to the corporate body, the believer actively participates in the sacrificing of their natural beliefs and ways of relating to authority and community. Insofar as the community of worship exists, this "renewal of your mind" is already a living reality displacing the world's schematizations. Yet this renewal depends on continual vigilance in exposing the ways the powers of this (and every) age have schematized our being, and, "What the transformation is meant to overcome is precisely "disordered" thinking about the way in which the individual members relate to the whole body by way of relating themselves to the other members."[394] This redeemed political reality exists to the extent that a new schema of political logic has penetrated its relations of bodies and minds. "The schema of rule in the secular world ("the rulers of the nations lord it over them, and those in authority are called benefactors") in which "natural authority", the authority of means dictates status, is confronted ("but not so with you") with a new way of understanding and exercising authority: 'The greatest among you must become like the youngest and the leader like one who serves.'"[395]

This transformed understanding of authority, remarks Wannenwetsch, reconceives authority and greatness from success *over* others to a "notion of service or ministry which marks out a greatness that makes others grow rather than diminish in its presence."[396] Furthermore, not only the church's leaders, but all its members hold such authority.

The modern hierarchical or division of labor definitions of authority which are popular today make such a claim appear to collapse the concept of authority entirely. The

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[393] Wannenwetsch "Members," 6.

[394] Wannenwetsch, "Members," 9.

[395] Wannenwetsch, "Members," 9. This runs precisely counter to the argument for natural authority in Oliver O'Donovan's Resurrection and Moral Order: An Outline for Evangelical Ethics, 2nd ed. (Leicester: Apollos, 1994), chapter six.

[396] Wannenwetsch, "Members," 9.

division of labor conceptualization of the society of the church assumes individuals are organized so that they can productively live out the fully formed gifts (skills) they bring when joining the social group. But Paul with his "members of one another" gestures toward a much more counter-intuitive formulation says Wannenwetsch. The paradoxical formula "members of one another" is used to break down the possible division of labor interpretation of "members of one body", by indicating that not only must I accept my charismata and that of others, but I am whole as I delight and take part in the expression of *their* gifts. Thus Paul's exhortation to Christians calls them to realize that they are members of one another not only in accepting others' gifts, but in delighting in their own weakness precisely as it is the occasion to be served. But even this formulation has not yet made clear the true challenge of Paul's mixed image, which is against the believer's self-perceived *strengths*.

What if, for instance, I am asked to sit under a preacher who is a lesser theologian than myself? Paul's claim is that even this, or especially this, is the forum for true growth of the body. Such a construal of political society runs directly counter to the "expertise" model of political organization based on the compartmentalization and fragmentation of knowledge, in which I must protect my expertise from the encroachment of non-professionals, while the body is conceived to be functioning "inefficiently" if its "organizer" is "deficient". Instead, Paul insists, if the unity of the body is the foundation of the body, then the gifts of the body are one, because the *body* is one if I do not amputate myself from it by my prideful refusal to delight in being served or uphold those who serve incompletely. The community's task of discernment is precisely *not* the validation of well-understood natural skills which people bring when they join the body, but prayerful seeking after the work of the Spirit who raises up those who will learn to properly render the service of authority. Each member has authority within a particular sphere, and thus serves the building up of the body into wholeness. By accepting this corporate task the church glimpses the possibility of living out its *true* being, which is to be a *community of discernment*, exploring God's will as revealed precisely in taking itself seriously as a particular, concrete community established and completed by God. "It is exactly this acceptance of mutual representation that allows the Church to become a

community of discernment that probes and explores God's will (Romans 12:2)," Wannenwetsch says. "For to know God's will is to do it, and it is only in doing God's will that it will be known. The political existence of the Church is itself the practice of exploring God's will."[397]

When the church asks itself who will represent the body as its leader, it is really asking who will *re-present* to the body that which already exists within it. In this way the body of Christ actively asks how it may ever more be transformed into its full being. Who has God established in the practice of making the rationality of faith apparent and awakening in the body its gifts? They are our teachers; and so on. Such an approach enacts in faith the claim that the charismata are not the private property of their bearers, but belong to the whole body, through which the community is maintained as a society, not as an organization ruled by experts.[398]

We must be clear in articulating the difference between this vision of political life and the view of TA in which the task of organizing the life of the social unit serves the basic goal of self-preservation. In stark contrast, Wannenwetsch indicates, the body of Christ submits itself to organization by the Spirit as a society which offers itself to be consumed by God's will. Its maintenance of social organization is not focused on the establishment and recharging of ecclesial authority, because it lives in faith that such authority arises as the community prayerfully discerns who the Spirit is raising up to fan to life the praxis of the body through the gifts of teaching, hospitality, preaching, etc. The spiritual reality of this distinctive praxis may not be apparent to the outside observer analyzing the church through natural conceptions of authority, yet this spiritual reality has a real if hidden presence. Preaching, for instance, may within natural categories appear as an active speaker instructing a passive audience. Yet when the church gives its attention to a preacher as "one's own member" it invests itself in the success of the act of

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[397] Wannenwetsch, "Members," 12.

[398] Wannenwetsch, "Members," 13. "Technology is always focused on property (the objectifying mode of getting hold of something as control) and is therefore a structurally private/individualized affair (even in its societal form), "possession" is a corporate phenomenon from the outset as it denotes what people have in common, share in." Bernd Wannenwetsch, private communication.

proclamation. In so doing it inspires the preacher's attentiveness to God as the congregation avows the importance of their own attentiveness to God in the preached word, so reaffirming the centrality of the whole body's attentive listening to God.

Here we have a nascent explanation of the place of technological expertise within the ethos of reconciliation. A preacher must undertake the technical preparation necessary to deliver a good sermon, but this preparation is worse than useless if not prepared in attentiveness to the claim of this *particular* congregation. At the same time, a preacher's deep love for a congregation is contentless in the absence of serious sermon preparation. The sermon, as a carefully constructed communicated word, becomes the instrument of an act of love between preacher and congregation. In this way technique finds its proper place, being neither an end nor a means but integral to the act. Understanding these connections we see that though proclamation may externally resemble a political speech, for instance, the lines of force in the body of Christ have their own distinctive being which throw a new light on technical practice.[399]

In concluding his outline of the social order of redeemed human life, Wannenwetsch summarizes the life form which is Christian worship thus:

> Every charisma represents the one *charis* just as every ministry (for example teaching) represents the one ministry (of witnessing God's *charis*) of the church by representing one charisma (for example understanding doctrine) in particular.
>
> Every office (for example teacher) represents the ministry (of teaching) in a (publicly ordered) way which differs from the way in which the ministry is represented by every other member….
>
> This is why there has to be a *paraklesis* such as Paul's which summons the body to a sound form of recognition of its peculiar political nature as it is highlighted in the said account of differentiated representation…
>
> The recognition of office is a way of recognizing ministry, which is a way of recognizing charismata, which is a way of recognizing *charis*.
>
> *Charis* as the fundamental level of representation is, of course, a highly critical principle which does allow every single charisma and its exercise in office and spontaneous service to be

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[399] Wannenwetsch, "Members," 14.

tested against its very own nature: Does the concrete way in which the office/service is exercised betray the gift character of grace? Or does it instead subvert grace in making its exercise look like an achievement, expecting praise, gratitude, etc.? Does it live up to the communal character (*panti*), or does it reclaim the charisma for the officeholder, denying the participation of others in it?[400]

***Redeemed Social Order and Secular Social Order***

This second section concludes by indicating how Wannenwetsch understands the social order of the redeemed community to interact with and influence the organization of secular society. We will then turn to a concluding section in which a range of practical moral claims about the proper shape of secular political life will be outlined.

The New Testament practice of intercession for temporal authority indicates that the body of Christ also accepts secular political authority, even when those authorities are hostile to the church. At the same time, Wannenwetsch continues, such prayer sets secular authorities under the same God who holds the church's authority in His hands. However secular authorities may conceive themselves, they are in fact within God's good grace, and their authority, like authority within the church, is ordained to re-present the common good of the governed. Because they bear this responsibility, the church's imperative is to call them to what their re-presentation entails, and to do so by indicating the possibilities embodied in its own practice.[401]

Here Wannenwetsch intends to sharpen Karl Barth's mature understanding of the linkage between churchly and secular authority, which also takes seriously the church's ordering by the Spirit as politically generative. Because the church and state are both ordered, and because "the civil community shares both a common origin and a common center with the Christian community,"[402] the insights of the church's experience of order

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[400] Wannenwetsch, "Members," 14-15.

[401] Wannenwetsch, "Members," 7.

[402] Karl Barth, Community, State and Church: Three Essays, with an introduction by Will Herberg (New York: Anchor Books, 1960), section VI.

may find their way into the secular order of authority. Yet, Wannenwetsch says, Barth's formulation is deficient in focusing solely on the witness of the church as speech, and his image of church and state as concentric circles is too unifaceted to sustain Wannenwetsch's more nuanced set of observations in which the whole field of political transformation within the church is kept open as generative for secular political life.[403] Barth and Wannenwetsch agree, however, that political ministers, authorities, and managers are, like authorities within the church, God's servants, called to obedience and service to the common good in their exercise of authority.[404] Secular society cannot of itself know that its authorities stand under this claim and therefore cannot call human hubris into question: it depends on the church to know this.[405]

Wannenwetsch clarifies his understanding of the political dimension of the worshipping church by comparing it with three other forms of political theology. The first understands the church as a political anti-type to society, within which the theologies of Augustine and Milbank might be placed. These anti-type political theologies correctly insist that there are true and false kinds of political activity in all spheres of political life, but are not as focused on how "counter politics" can become the "encounter politics" which allow the church's way of being to rub off on secular society (we will return to this questioning of Augustine's formulation in chapter six). A second form of political theology understands the church as an ideal type which provides the state with social principles, and is embodied in the political theology of William Temple and the mainstream liberal Protestant tradition. Such theologies are interested in elucidating the positive influence of the church on wider society, but tend to ignore the church's *practice* of worship, preferring to offer political principles derived from abstract concepts like sacramentality. A final form is the paradigm (Karl Barth, Stanley Hauerwas) or model mode of theologizing (John H. Yoder), which recognizes that political worship neither

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[403] Wannenwetsch, Gottesdienst, 507, n. 228.

[404] Barth, Church and State, trans. G. Ronald Howe, intro. David L. Mueller (Greenville, S. C.: Smyth & Helwys Publishing, Inc., 1991), 57-58.

[405] Karl Barth, "Christian Community and Civil Community," in Barth, Community, State and Church, section seven.

mirrors existing political structures nor provides them with religious rationales, but is a unique instantiation of the politics of God. As a proponent of this type of approach, Wannenwetsch is keen to emphasize that the church as political body is unique, and as such provides the secular polity with a way of conceiving "power," "citizenship," "decision-making," "difference," etc. which it does not possess. It does not tell the secular community how to enact these insights, but makes possible both a positive call to society and a clear set of alarms when policy has run afoul.

Though its reality is often hidden to natural perception, the work of the body of Christ is to bring before political authority the transformation of social life as God's work of reconciliation. The body of Christ calls political authority to its Lord by living out this reconciled and reconciling transformation, and in doing so opens the possibility of a correspondence with its own life in the wider society which that wider society cannot itself initiate.[406] "The deconstructive potential of the politics of God as enacted in the life of the church always begets…constructive hope. Though renewal of secular rule will hardly start from the peace that Christ has wrought, it may begin with the penetration of important realizations into the political consciousness."[407] If the church's life as a political hermeneutic of the Gospel is to make any claims on society, they will spring from the concrete moral distinctiveness of the life of the church.

### *Clashing Forms of Life? The Politics of Management and Discernment*

This chapter's final section will draw from Wannenwetsch's understanding of the unique political life of the church some ways in which secular society may be called to a more robust and healthy form. Its subsections will take up many of the problems of technological political technique raised in chapter three.

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[406] Barth, "Christian Community," section 14. Wannenwetsch thus corrects a significant omission by Barth who tends to speak as if the church must *choose* to be political by "taking up its share of political responsibility."

[407] Wannenwetsch, "Members," 1.

In order to elucidate the ethical implications of Wannenwetsch's argument, it is important to have grasped the polarity that has been established. On one side is a society described in Part I (especially chapter three) which is based on a vision of an ideal state of social efficiency, and which seeks powerful political control by minimizing open means of persuasion. On the other, Wannenwetsch has described a society based on a vision of action which conceives the present, confusing yet diverse community within which we currently exist as a divine gift to be explored. This section and its parallel at the conclusion of the next chapter are devoted to grasping in practical terms how and where these two very different ways of life may be seen to conflict.

We may be tempted to believe it is impossible for the church to be organized in reliance on the Spirit's bringing together the fruits of individual's faith to form a community. We may also believe that the search for such an organization would be hard or meaningless. Yet Wannenwetsch has insisted that the church both relies upon and must take active part in the building up of precisely such diversity of the body. Because God cares for secular society as well, the church may likewise hope that having revealed His own politics to the church, He may open the eyes of its rulers and citizens to the implications of the church's life of reconciliation.

As the body of Christ explores its life in secular society it will ever again come to the practice of worship with questions about how it should reconcile antinomies placed upon it. Again, as Bonhoeffer has warned us, it must not attempt to deal with the technological society by constructing a systemic and ideal Christian ethic which would only offer a new political technology to replace current constellations. This means that Wannenwetsch's (and Bonhoeffer's) formulation specifically disavows offering global solutions to the technological dilemma but clarifies the conditions which must be held open and the priorities of action which make the faithful attempt to explore rifts which arise in the course of life in technological society. The church's worship is generative as it explores the reconciling of rifts it experiences and learns in wider society. The upshot is that no form of government or division of political power is finally and undebatably

"Christian": there is only a Christian claim on the action of governing and the forms taken by political life.[408]

Foucault's observations about the interpenetration of government and business interests and Grant's protests against the co-opting of the university by business have proved to be highly relevant in relation to Wannenwetsch's claim that worship both creates and situates the economic and governmental spheres. This is especially true when the logic of biopower works to link politics and the managerial culture because both understand the telos of the exercise of authority to be maximum growth. Wannenwetsch's formulation is not against the "building up of the least of these", which is implied in the technological project, but is against biopower, which uses its own methods to do so as it seeks very different goals. Here we will look at the practical difference the implementation of the two logics makes, and in chapter six we will look at their differences at a more schematic level.

I will attempt to discern the practical import of Wannenwetsch's position along two central lines of inquiry. First, how does the church's way of life confront or confirm the processes of contemporary political technique? Second, how does the church's way of life confront or confirm the ways individual citizens take up the schemes of political authority so that these schemes are applied throughout their lives, becoming the guiding logic of their life?[409]

The remainder of the chapter will take up in turn a series of assertions about contemporary political life made by Foucault, and show how the life of the church might be understood to claim 1) the action of political authority, 2) the action of citizens, both as good citizens and in calling those authorities to their proper role, and 3) the inner life of the believer. Though Wannenwetsch disavows the project of deriving ethical norms from the church's practice, by pointing to several specific practices of the church's life of

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[408] Barth, "The Christian Community," section 21.

[409] Foucault has exposed the intertwining of "private" life and "public" technique. Charles Taylor's Sources of the Self: The Making of the Modern Identity (Cambridge, Mass.: Harvard University Press, 1989) is the classic contemporary examination of the relation between one's self-identification and one's activities of moral self-discipline.

discernment I hope to hold together the importance of lived worship and the development of the skills of the good inner life called for by Grant. By noting the relevance of a few of the church's practices for the understanding of the good inner disposition required to live in such a society, I am not suggesting a mechanical linkage between the inner disposition and practices, and freely admit that the linkages I make between aspects of the Christian ethos and its practices might very well be replaced or supplemented in the development of the good inner life by the lessons provided by engagement in other church practices.[410] The point is that deficits of our everyday habits may be challenged by carefully attending to the development of the ability to live out peacefully and naturally the life of the Christian community. By indicating specific churchly practices in which this challenging might take place, I hope to indicate points at which the life of the church illumines aspects of our social character.

## Implications for Authority and the Examination

The previous chapter indicated how, under threat of war and epidemic, political techniques such as the examination have developed which govern modern life based on the formal commitment to seek continually to maximize the growth of society and the output of labor. These techniques are held together by the power of commonly accepted polarities and antinomies which we now compare with the life of the worshipping community. We do not take up all of Foucault's examples, but examine the trends he has indicated to show how the transformation of the worshipping community might flow out into the exploration of secular political life. The material discussion which follows will trace the organizing scheme of the last chapter and the implications of the life of worship on the political practices of the examination, the spectacle and work.

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[410] Our attempt at such a project has some sympathy with McClendon's thesis that the church's resources for its political life spring from the shaping of the conscience and judgment in the practices of the church's communal life. See James W. McClendon, Jr., Systematic Theology: Ethics (Nashville: Abingdon Press, 1986), chapters 6-8.

The last chapter suggested that the fearful urgency of political action in war and epidemic now characterize the whole self-identity of government and business, which understand their behavior as part of a tactical struggle that equates a lack of growth with the beginning of corporate extinction.[411] The introduction also claimed this assumption grounds the moral deliberation of TA. But Wannenwetsch has argued that the growth of the Christian body is built on the precise *opposite* of the fear of extinction, aiming at the growth of unity which invites the whole world to join the Christian community. Because God is understood to be responsible for this growth in unity and numbers, fear and human responsibility for ultimate success is relinquished. The worshipping community knows that corporate survival is not the ultimate good and refuses to be pushed into denuding political arrangements to serve survival or efficiency. The tactics of the worshipping community grow from a refusal to capitulate to the spirit of self-preservation, seeking instead just or Spirit-ordered corporate organization in the trust that its transformative and generative *habitus* will be sustained by the God who sustains His kingdom. This means its desire for growth in righteousness assumes a readiness for God to disband or extinguish any particular worshipping community.

In this way, the logic of worship challenges political authority and the assumptions of TA by throwing its grounding assumptions of scarcity and the normative demand for physical growth into doubt. One implication of such a claim would be the generation of a call for political authority to query the inner links between the massive investment in genetic technologies and the biopower imperative.[412] The logic of worship calls citizens to live as reminders to secular authority that cost-benefit politics and political appeals to fear which press action over careful deliberation are unacceptable. They will act as a social force calling political authority to defend its policies by reference to the care of the existing social body rather than self-protective or consumer demand-oriented rationales. Relativization of the believer's sense of responsibility for individual survival might come through engagement in the church's practices of tithing or through

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[411] Foucault, Discipline and Punish, 162-166, 168-169.

[412] Cf. Russell and Vogler, The International Politics of Biotechnology.

its prayer "Give us our daily bread," indicating the freedom of the good inner life which grounds the possibility of such political transformation.

The formal commitment embodied in the biopower imperative, it has been suggested, is materially filled out in the techniques of manipulating visibility and invisibility. In terms of invisibility, Barth expresses the thrust of this chapter by categorically stating: "The statecraft that wraps itself up in darkness is the craft of a state which, because it is anarchic or tyrannical, is forced to hide the bad conscience of its citizens or officials."[413] Barth's comment predates but addresses Foucault's claim that modern political power in actual fact works by *not* talking, by withdrawing itself, and acting in small but invisibly coercive ways.[414] By contrast, Wannenwetsch has argued, Christian authority, as a conduit of the word, exposes itself, states its case, convinces and draws along, and does *only* this, rejecting the undoubted but destructive efficacy of coercion. Its acts of authority seek to draw the community in small steps by public persuasion through the word. It repudiates the manipulative masking of its power, either through the flamboyance of spectacle or less visible micro-disciplinary sanctions. It therefore rejects government which treats citizens as "cases" to be continuously examined so that a web of information can be constructed for potential use in coercion. Conversely, it supports government which values the personal contact of discipleship, conversation and persuasion.

The logic of worship places a claim on political authorities who govern by covert operations, intelligence services, and multiplying the means of surveillance and examination. A reconciliation-marked political power refuses to demote the citizens in its care from explicit participants in political engagement to participants in social decision-making only through their sociological or consumer profile. It is therefore skeptical of the proliferation of information gathered by CCTV, consumer loyalty cards and electronic devices, and of the physical and electronic monitoring of the workplace. And again, it is skeptical of the power offered to government by the newest and most penetrating exam:

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[413] Barth, "The Christian Community," section 22.

[414] Foucault, Discipline and Punish, 200-202.

the genomic exam.[415] The logic of grace asks the citizen to consider resisting such moves by authority, at times explicitly calling authority to articulate its hidden machinations, at other times by non-cooperation with government by examination, for instance, by mechanical means of examining and directing consumer preference (such as the consumer card). Wannenwetsch has touched upon the practices which may indicate the good inner life needed to sustain such a political movement: exposure of our need and the gifts of presence and of self-involvement.[416]

Another material technique of the biopower project is the minimization of individuals' difference in the quest for increased social utility. Force is deployed by such techniques in the myriad of ways observed in chapter three to break the individual down so that they may be reformulated under the control of political power. This, Foucault incisively observes, is the monastery made secular by the replacement of its rationale of reconciliation for that of coercion.[417] Such a procedure can only be understood as a macabre mimicry of the Christian conversion experience, now based on the logic of force, in which the useless old creation must be given up and the new re-formed.[418] In contrast, the conversion of baptism, while asking the same total renunciation of old ways of being,

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[415] The attachment of knowledge is the first move of biopower of which the Human Genome Project represents a fulfillment and infinite extension. Its promise is to ameliorate disease, but it also offers immense power to enhance and augment the very forces of life itself. Such observations make comprehensible how the medical establishment, represented by one Christian geneticist, could mix the promise of benefit with the implied threat of legal enforcement. Cf. James C. Peterson, Genetic Turning Points: The Ethics of Human Genetic Intervention (Grand Rapids, Michigan: William B. Eerdmans Publishing Company, 2001), 339. Here the ethos of the hospice movement provides salutory contrast in indicating the limits of cure and the centrality of care in medicine, even as it utilizes technology to do so. See Michael Banner, "Christian Anthropology at the Beginning and End of Life," in Christian Ethics and Contemporary Moral Problems (Cambridge: Cambridge University Press, 1999), 75-83.

[416] See also McClendon's portrayal of the centrality of the practices of presence and listening for body life, in McClendon, Systematic Theology, 82-83.

[417] Foucault, Discipline and Punish, 136-37, 164-66, 177-181, 306.

[418] Thus splitting the work of Creator and Redeemer. Karl Barth, Church Dogmatics III, The Doctrine of Creation: Part 1, trans. J. W. Edwards, O. Bussey and H. Knight, ed. G. W. Bromiley and T. F. Torrance (Edinburgh: T & T Clark, 1958), 43: 3.

reformulates by reconciling and rebuilding the individual into a new and unique wholeness as an indispensable, not interchangeable part of the community of faith. Secular docility programs are justifiable at best for simple physical processes, while the claim to remake man in order to *control* him is an unwarranted deification of political authority, an abuse of its true role. In worship, *God's* Spirit is the reforming and transforming agent, reforming bodies into His likeness in which each is unique, striving for greater communal unity by bringing about the wholeness of the uniquely personal. God's mode of political organization is not confined to the church, and He likewise cares for the secular polis, against its desire for dissolution, through true authority whose proper task is to convince those under its care that it is acting in their best interests by being attentive and responsive to their stated concerns.

The logic of worship calls political authority to reject indoctrination methods of personnel management and the striving for a totally mobile workforce. It bars political authority from making the dream of the Enlightenment the rule of the workforce: that freedom is found in complete renunciation of all contextualizing attachments, and the continual revolution of labor's activity and knowledge in the pursuit of maximum unfettered possibility. Negatively, the logic of worship marks the citizen with the desire to refuse authority this unlimited claim to remake. Positively, it urges the challenging of political authority to make the effort to seek equitable labor arrangements while undertaking to practice the rooting in place and involvement with local life which resists the ideal of the continual mobile workforce. The good inner life which makes such embodied locatedness both attractive and possible begins with the exposure of the vacuous inner life urged upon us by the technological way of being.[419] We glimpse the

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[419] The Enlightenment's ideal for personal discipline urges a vigorous remaking of the self (again built on the body as tool) to bring it into line with this monadic and materialist ideal. Concrete technologies can augment the logic of technological self-discipline. "You record the food you eat…and Diet Log calculates the calories you take in for the day. ExerLog software…provides the same services for exercise and regular activities of daily life, and calculates the number of calories burned…WeightLog software tracks and graphs weight …BodyGEM, a hand-held device…measures a person's metabolic rate and calories burned…This information can [be]…integrated with diet and exercise data…the information can be sent to the company's interactive Web sites, where virtual dietitians and personal trainers analyze it and give users feedback and a

possibility of new life being poured into this void in the attempts of the worshipping community to find its true form in which personal and collective giftings mesh into a whole greater than its parts. This search is a practice entailing committed participation in a local worshipping community.

Modern political technique forms individuals whose skills make him or her more controllable at more levels by political power but which are of little value to the individual.[420] Conversely, the life of worship is founded on the Spirit's fanning to life the particular gifts of individuals. Thus good authority within the worshipping community aims to train the members of the body in righteousness, the ultimate private/public skill. Likewise, it expects that each embodiment of righteousness will be unique, and from this uniqueness the corporate entity thrives as authority guides the body in bringing to life individuals' self-discipline.[421]

The logic of worship claims political authority for the spoken word and commitment to the long-term development of labor and against automatic control and obedience to the whistle. This amounts to a refusal of a basic principle of Taylorism, that skilled labor is more costly and less reliable than "skilled" machines.[422] Critiques of Taylorism (traditional assembly-line manufacture) and the search for good postindustrial manufacture need not take the route of assuming the economic benefit of high turnover or

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personalized plan." Cristina Lourosa-Ricardo, Wall Street Journal Technology supplement, Nov. 13, 2000, R25.

[420] Foucault, Discipline and Punish, 138.

[421] 1 Corinthians 1:1-8.

[422] Elsewhere Rawlins makes a comparison between political technique and computer programming which is illuminating for our discussion. Napoleon's army was first taught simple actions, which were then tied together in another layer of more complex actions, which were further bundled by commands, all of which the commander actualized by delivering simple instructions into these complex layers of pre-instruction. Political technique thus directly parallels computer programming. The practical problem is that the soldier (or computer) is not allowed under that model to take any initiative, even if she thinks that an opportunity might be opening up which the commander does not see. The point that this illustrates on one hand is the lack of initiative which this political technique allows those under its command, and on the other it points to the motives behind mutations toward more "free" models of the Napoleonic discipline technique. Rawlins, Slaves to the Machine, 45-46.

of a skilled but highly mobile work force. There are good reasons to embrace their opposites: skilled teams of workers having fluid duties and a high valuation of the tacit knowledge of long-term employees.[423] The Christian as citizen and worker resists capitulation to regimes of segmentation and indoctrination, by preferring to call authority to the costly but necessary effort of building trust and skills in a political body or labor force. The inner life necessary to sustain attempts to live out such commitment is generated in the worshipping community's involvement in discipling and teaching, the passing on of the many levels of knowledge which sustain the unique form of the Christian life.

## Implications for Authority and the Spectacle

If the examination is deeply entwined with the punitive or repressive function of political technique, the spectacle is its mode of active persuasion in which explicit conversation is replaced by the *manipulation* of opinion.[424] In a society whose authority is committed to silent coercion, an essential political task is the building of consensus and recharging the authority to govern through the technological spectacle.[425] We have seen, however, that persuasion by spectacle has several collateral effects. These include the inflammation of human wonder at humanity's own power, the heightening of political pacification, the emphasizing of materialist visions of human affairs which augment social conservatism, the encouragement and manipulation of consumerism, the erasure from view of the human costs and long-term impacts of a given technological change, and, most importantly, the displacement of political conversation in favor of government by examination and spectacular persuasion.

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[423] See Larry Hirschhorn, Beyond Mechanization: Work and Technology in a Postindustrial Age (Cambridge, Mass.: The MIT Press, 1984).

[424] Foucault, Discipline and Punish, 200-202.

[425] It is worth keeping in mind that the technical problem of how authority communicates its legitimacy is central to its ability to function. Cf. Milgram, Obedience To Authority, 230.

The worshipping community that knows it is constituted by the Spirit and word eschews unidirectional manipulation of the community by authority. It is aware that the visual is the form on which overview and strategy rely, while speech and hearing privilege presence in time and space, creating opportunities for trust.[426] At the same time, because it seeks to re-present the good of the community, Christian political authority is committed to awareness of the wider *human* effects of its operation, and will always define political action in these terms rather than in those of ideology and party. The contrast here is between the sub-society which contributes to the wider society's search for practices of wholeness, and that sub-society which exists solely in the exertion and expansion of its influence on the political matrix. One society demonstrates its identity by sharing its resources with wider society, the other seeks to establish itself by developing its power of influence.[427]

Modern authority's practices of "public relations," which we saw so clearly in the understanding of TA that public image is the main limit on the free action of political power, are questioned by this Christian understanding of authority. Such priorities underlie a whole complex of explicitly or implicitly manipulative political strategies centered domestically on government by public relations and pronouncements of public intellectuals, and both domestically and internationally in the use of propaganda, or entertainment as propaganda, and advertisement.[428] The logic of worship restrains political authority from attempting to augment its power by manipulation via the spectacle, in recognition of the wide range of destructive effects on those so governed. For the Christian citizen who has become aware of the place of the technological spectacle or manufactured sublime in contemporary life, such events represent an important possibility for the confession which reverses the intended manipulation of the manufactured event. At a more mundane level, the Christian citizen may live out in daily

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[426] Wannenwetsch, Gottesdienst, 511-513.

[427] Wannenwetsch, Gottesdienst, 443-445.

[428] For an excellent comparative historical study of these processes see Mikael Hard and Andrew Jamison, The Intellectual Appropriation of Technology: Discourses on Modernity, 1900-1939 (Cambridge, Mass.: The MIT Press, 1998).

life the potent political statement of continual critical engagement with the utopian promises of the imagemakers whose goal is to secure, for instance, the brand loyalty of consumers. Remembering Burke's observation that the sublime engages all the senses but especially the eye[429] the good inner life indicated by worship is the nurture of a healthy sensitivity to and skepticism of the political implications and promises of the spectacle. Such skepticism can only be healthy if built on a positive experience and appreciation of the word and the listening presence which grounds a functional political life in which consensus-building is practiced.[430]

Foucault's work has suggested that the disciplines seek to instill the belief that political hierarchies in which authority stands at the top, the unskilled and unlettered at the bottom are all-important and should motivate our work.[431] But Wannenwetsch draws out the great Pauline theme that human community has everything to gain from the contribution of the weaker members who have "greater honor."[432] In worship we are first reconciled and equalized, and thus such hierarchies are not only stripped of their motivating power but, in addition, those who seek glory by social climbing are exposed as anti-Christ. Only the "measure of faith" properly establishes difference within the body of Christ, differences which are individual because linked to charisma. Authority is thus the *service* of elevating the least of these, and is properly held only by one who serves the community rather than using the community as a forum to achieve social recognition.

A political authority which is impacted by the logic of the body of Christ finds its meaning in developing individual aptitudes which are useful to the worker and thus gladly used, repudiating techniques and machinery which are built on the premise that workers become most productive when arranged in a series which assumes them to be equivalent biological machines.[433] It will also not rely on setting up a social hierarchy as a

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[429] Nye, Technological Sublime, 284-85.

[430] Wannenwetsch, Gottesdienst, 539-540.

[431] Foucault, Discipline and Punish, 227.

[432] Cf. 1 Corinthians 12: 22-26.

[433] Such thinking is the hallmark of modern industrial processes, and was fine-tuned by Fredrick Taylor's system of using time and motion studies to maximize worker productivity by conceiving them as biological

basic tool motivating those in its care. That such methods are nonetheless in widespread use places important demands on the Christian citizen in many different walks of life. While recognizing the legitimate pedagogic value of the competition of "iron sharpening iron", the Christian citizen will understand and refuse caste as motivator because seeking to nurture *all* those given to the community, including those who are given non-standard skills. The *discerning* authority is the glue of church politics. Such esteem for the non-standard and eschewal of social pressure as motivation is possible in a community whose inner life is marked by the development of skills of attentiveness to, and love for, "the least of these."

Implications for Authority's Conception of Work

Foucault contends that one of the fundamental tenets of our age is that time measured and paid is the property of the employer, to be used diligently and precisely.[434] But the worshipping community as described by Wannenwetsch experiences a decisive relativization of human authority which rules out any claim to have authority over time. Such claims by authority function to loosen subordinates' sense of moral responsibility for their action. Yet Wannenwetsch has indicated how Christians do not believe any time or space exists in which God's claim on humanity is abdicated, meaning that authority is always limited to being simply a necessary moment in God's leading and remaking of humanity. Because, as Bonhoeffer has argued, humans are meant for freedom, no human action can be good which surrenders its moral accountability to God to any other authority. And, as Wannenwetsch has argued from the life of the New Testament church, no authority can be good which seeks to dissipate the moral accountability of those under its care.

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machines. See Hirchhorn, Beyond Mechanization, 13-15, passim. While Taylorism is being modified and supplanted in many ways, its continuing power is nowhere more evident than in the rapidly expanding fast-food industry. See Schlosser, Fast Food Nation, chapter three, passim.

[434] Foucault, Discipline and Punish, 149-155.

The life form of worship challenges secular political authority to do away with *any* claims of inviolable sovereignty. It cannot ask the renunciation of moral responsibility by citizen or employee, nor begrudge those under its care the necessary space to maintain the processes of sustaining their family lives, because this too stands under the protection of God's authority (as we will discuss more in the next chapter). This maintenance of the space for life might entail programs like generous maternity leave and scheduling flexibility, or a limit to the work week. The citizen's refusal to validate the public/private split of technological being issues in a refusal of the demands that "public" existence illegitimately places on "private" existence. The citizen does this not by calling for a renewal of authority's respect for the "private", but by implicitly urging a practical commitment to developing and maintaining a balance between work and the rest of life. The good inner life which can sustain such a balance is brought to consciousness in the idea and practice of Sabbath, which is the topic of the next chapter.

Arnold Pacey's observations about the many levels at which work may feel meaningful to us indicates how technical meaning and the desire to please authority may subvert the individual's moral sensitivity by tying it to the technical task or wishes of authority rather than the human ends of work.[435] Here the practice of authority in the worshipping community has a great advantage over modern authority: churchly authority always asks to have its commands judged before God's mercies, meaning that it systematically trains its agents into identification with the *human* ends of its work, *not* distracting attention from these ends by focusing on the perfection of technical processes, *nor* on the satisfaction of authority.[436] Christian action is barred from seeking validation from a narrow community which shears technical work from its responsibility to consider the wider community. To assert this is to reclaim the idea of the profession, in which a

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[435] Pacey, Meaning in Technology, 176-177.

[436] Understanding oneself as acting before God does not trivialize human authority, but relativises the claims of authority by reference to empathy with effects of our action on other humans. Cf. Milgram, Obedience To Authority, 66.

guild "professed" that they would uphold the provision of a specific good to society, refusing its exploitation for gain.[437]

Reconciliation-impacted political authority thus finds itself renouncing the exploitation of a technical community by a management community by relying on or promoting the technical community's ignorance of future applications of their work. Such authority seeks rather to inform all its constituents of the ultimate and tactical aims which their work serves while inviting moral participation of technical and manufacturing communities within the framework of the search for the benefit of product recipients. Good citizenship will likewise entail an inquiring desire to understand how one's work impacts the wider world. The most important act of reconciliation-marked citizenship is to call authority to its proper limits by categorically refusing to become self-identified with any narrow working community to the exclusion of wider communities also impacted by that work. The practice serving the good inner life which sustains this widening of empathy is the practice of evangelism, the empathetic work of inviting the human community to its proper home.

### *Questioning Further with Wannenwetsch*

In summary, this chapter responds to Grant's call to mitigate the destructive features of technological life by developing a robust vision of social justice and the good inner life. It has endeavored to do so by explicating the form of life of the community God is redeeming and sketching some practical implications of this way of life in order to situate and stimulate more detailed discussions of a range of concrete technologies and management techniques.

Part I argued both that the practices of technological society form thought in subconscious ways *and* that any response to technological society must assume an important role for the displacement of this knowledge through other practices. I take it that Wannenwetsch's theology attempts such a task, and at least opens the possibilities

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[437] See Bonhoeffer's discussion of the medical profession in "Vocation," chapter six in Ethics, part I.

for further thought along this dual trajectory. This does, however, suggest a criticism of Wannenwetsch's formulation. On one side he is not aware enough of his own conceptual claims. He never undertakes a phenomenology of the practices of worship and the *ways* they might form us, despite affirming that they are indeed essential in shaping the thought and practice of believers. Instead he begins and ends with conceptual discussion, not taking full advantage of the basic observation that religion is action: it is formed action which teaches in more ways than we can explicitly know, and is therefore worth examining in more detail. Yet Wannenwetsch is among the precious few theologians who are fully aware of the shaping power of practices and thus opens a way to respond to Foucault's observations about technological practices forming us below our threshold of knowledge.

A final criticism of Wannenwetsch is that, from the other side, he is *too* aware of the wide range of connections between the practices of worship and their wider ethical implications. He tries too hard to avoid giving shape to the complete openness of analogical logic. Having criticized Barth for illegitimately narrowing ethical thought by too rigidly attaching ethical deliberation to specific doctrinal loci, he also criticizes Hauerwas for the same narrowing in tying the field of ethical thought to specific liturgical moments.

Wannenwetsch concludes, "Even if the writers concerned stress that the allocations are merely exemplary, the outcome tends to be a shortening of the perspective…Hauerwas of course knows that, just as Barth was aware of the difficulty; but that does not do away with the problem involved in such a procedure."[438] It is my contention that such a claim unnecessarily jettisons the critical boundaries made possible at well-defined moments in the life of the worshipping community. It will be the burden of the next chapter to substantiate this criticism, by showing the theological fecundity of a sharply defined doctrine through which we can respond to the calls of Grant and Heidegger for material order to shape technological practice.

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[438] Wannenwetsch, Gottesdienst, 100.

# Chapter Five: Karl Barth on Sabbath and Creation

[T]he Lord through the seventh day has sketched for His people the coming perfection of His Sabbath in the Last Day, to make them aspire to this perfection by unceasing meditation upon the Sabbath throughout life.

John Calvin[439]

The last chapter drew its moral insights about political ethics from an examination of the practices of the church's life together. This chapter, by contrast, directs attention to one doctrine, creation, and one ethos, the love of creation, to draw out another set of moral claims on human action. Bonhoeffer's argument, given at the beginning of chapter four, indicated the importance of Christian ethics finding its orientation as it asks about "permission" rather than "What is permitted?" By beginning from questions about permission, moral questioning takes place within an assertion of the moral unity of all things under Christ, a claim which links the thought of chapters four and six and frames this chapter's consideration of the doctrine of creation. Yet this chapter will not "derive" moral axioms from the doctrine of creation in a top-down fashion any more than the last chapter "extracted" moral truths from experience with a bottom-up method. Rather, this chapter's contention is that we correctly explore the moral import of material order only by inquiry into revelation which serves to guide our search to comprehend human action which conforms to the action of the Creator.

Heidegger's analysis has given us reason not to come to creation with overly defined ideal categories, which cause us not to pay attention to the contours of creation's own order. Grant further clarified this problem by indicating the tendency of technological being to find what it seeks in materiality. In order to avoid this trap some broad categories of being are needed which still give us space to explore the claim of

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[439] John Calvin, Institutes of the Christian Religion, Book II, ed. John T. McNeill, trans. Ford Lewis Battles (Philadelphia: The Westminster Press, 1960), chapter VIII.30.

natural order upon us, yet which admit a teleological framework which can guide our understanding of the *meaning* of that form. This is of course precisely what we are offered in the Genesis account—a loose idealism if you will, but one which tells us what all being is for, how it is related, and where to begin to look to rightly understand the claim of the material order. "What seems to be needed," Christoph Schwöbel suggests, "is not an ethics of creation, but an *ethic of createdness* which is informed by a *theology of creation*."[440] In other words, in what way does the shape of God's creative act determine the act of the creatures so created?

Drawing on the meditations of Karl Barth from volume III of the Church Dogmatics, this chapter will begin by indicating the integral connection between the doctrine of creation and the practices of worship. In particular, Barth uses the concept of Sabbath to draw out the importance of the *concept* of creation which emerges from and clarifies our practice of worship, facilitating in turn the development of useful categories for our understanding of creation and thus our knowing and making. Next this chapter will examine how Barth utilizes the notion of Sabbath to link worship with a Christian ethic of work which takes seriously the created order as divine gift. This linkage of worship, work and creation will be elucidated by contrasting it with the technological way of life as displayed in contemporary farming and human reproduction. This chapter is intended to indicate how Christian moral theory might espouse a view of creation in which created order is not worshipped nor dismissed but is treated as a gift claiming our love. Only when freed by this love, first of God and then of materiality's order, can we be playfully responsive gift-returners, not overawed or dismissive of the gift of creation.

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[440] Christoph Schwöbel, "God, Creation and the Christian Community: The Dogmatic Basis of a Christian Ethic of Createdness," chapter eight in Colin Gunton, ed., The Doctrine of Creation: Essays in Dogmatics, History and Philosophy (Edinburgh: T & T Clark, 1997), 150.

## *Linking Worship and Creation in Moral Theology: Sabbath as Ethical Master-concept*

The crowning vision of Christian theology is the triumph of all creation praising its Redeemer.[441] Here Christ is fully expressed as the end of all creation in the action and therefore being of that new creation. That creation is new indicates that the transformation of the worshipping community goes beyond its political existence, also transforming its material being. Worship is one way of describing the first moment in God's renewal of creation, new life coming as a word spoken to humanity, breaking in to renew its being both by separating it from creation and exposing its proper union. We move now to further explore the unity of worship, living in grace, and the love of creation in our look at the implications of the church's affirmation of God as Creator.

The issues raised by the chapters in Part I cannot be fully addressed by focusing only on the life of worship, and we must seek concepts which recapitulate all that is learned in worship while opening it up in a formed way to the examination of human life as creaturely. I will contend that the most appropriate linking concept is that of Sabbath, which comprehends the transforming listening to the Spirit which is worship within the material frame for human action, the creation. On one side Sabbath names God's interruption of our illegitimate identity with creation, our work, our technologies—our whole way of life. On the other it indicates how life is re-formed by this interruption into a receptive mode of working, thinking and living. This is not to imply that our discussion of worship was dismissive of the import of materiality on social life, but here we explicitly refocus our analysis on the specific ethical import of the church's confession of the Trinitarian God as Creator. The focus of this chapter shifts from the largely political questioning of our action to the more material and embodied questioning of our being which Karl Barth understands as an integral part of the action of God as Creator.

In paragraph 41 of the Church Dogmatics, Barth expounds the biblical account to explore how God's Sabbath rest (Genesis 2:1-3) claims human worship, setting it into its proper orientation toward creation. He concludes that the love of creation is the central

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[441] Revelation, chapter four.

orienting consideration for human work. Barth already understands the second creation saga to be specifically concerned with defining good human action, and thus considers it apposite that here God's Sabbath rest is established as its prerequisite. In the second saga creation is portrayed as being brought to its completion with the union of man and wife. God was content: "He was satisfied to enter into *this* relationship with *this* reality distinct from Himself, to be the Creator of *this* creature, to find in *these* works of his Word the external sphere of His power and grace and the place of His revealed glory. A limit was revealed."[442]

Having found the object of His love, God is depicted turning from a focus on the work of ordering His creation to the work of upholding and loving the finite creatures as they are. By both concluding His creative activity with humanity and proceeding to celebrate His creative work with them, God immediately declares His allegiance to humanity, sealing His intent to make His love a temporal event on which He stakes His honor. For the creature this rest with God was all important, because "creation, and supremely man, rested with God on the seventh day and shared His freedom, rest and joy, even though it had not as yet any work behind it from which to cease, and its Sabbath freedom, rest and joy could be grounded only in those of God and consist only in its response to the invitation to participate in them."[443]

Barth contends that this first observance of Sabbath by God and man together is the culmination of both creation sagas, an intimation of the Incarnation, and the establishment of the practice of worship. It thus grounds the covenant promise of redeemed human action. Here God rests with humanity not because creation is complete and now to be left on its own devices, but because He sees at that moment its eschatological completion as it rests in Christ. God rests in Himself always ("I will be who I will be"), but He rests in time to bestow His rest on His creatures to give *them* time (to share participation in His life). Thus this first *rest* is the coronation of His creative work, not, as has often been supposed, the creation of humanity. "When God celebrates

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[442] Barth, Church Dogmatics, III.1, 214-215.

[443] Barth, Church Dogmatics, III.1, 217.

the completion of His work, this totality becomes the festive hall and man His festive partner."[444]

The history of the doctrine reveals that Barth's use of Sabbath as an ethical master concept is indebted to Calvin, who sought to develop Augustine's and Luther's positions.[445] Barth follows Calvin (and Luther) in moving the fourth commandment to the head of the decalogue, saying,

> The Sabbath commandment explains all the other commandments, or all the other forms of the one commandment. By demanding man's abstention and resting from his own works, it explains that the commanding God who has created man and enabled and commissioned him to do his own work, is the God who is gracious to man in Jesus Christ. Thus it points him away from everything that he himself can will and achieve and back to what God is for him and will do for him.[446]

This bold statement of Sabbath as a global description of redeemed human action seems at first glance to be a counter-intuitive reading of the fourth commandment, but Barth is grounding this reading in a well-established theological line of thought drawn from a decisively Christological interpretation of scripture. He is not asserting that the act of resting from our works supersedes all the other commandments, but that the ethical substrate of all the commandments is a demand that humans rest from action and belief

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[444] Barth, Church Dogmatics, III.1, 223.

[445] St. Augustine, "Against the Manichees, Book 1," chapter 22.33-34 in Saint Augustine on Genesis: Two Books on Genesis Against the Manichees and on the Literal Interpretation of Genesis: An Unfinished Book, vol. 84, The Fathers of the Church (Washington D.C.: The Catholic University of America Press, 1991). Cf. also St. Augustine, City of God (REF), bk. 11.9, bk. 22, chapter 30; Martin Luther, "Treatise on Good Works, 1520," in Luther's Works: The Christian in Society, vol. 44, ed. James Atkinson, trans. W. A. Lambert (Philadelphia: Fortress Press, 1966); Calvin, Institutes of the Christian Religion, vol. 21, chapter VIII.1, 28, 31-33; John Calvin, A Commentary of John Calvin, Upon the First Books of Moses Called Genesis, trans. [from Latin] Thomas Tymme (London: Henry Middleton, 1578), 52.

[446] Barth, Church Dogmatics III, The Doctrine of Creation: Part 4, trans. A. T. Mackay, T. H. L. Parker, H. Knight, H. A. Kennedy and J. Marks, ed. G. W. Bromiley and T. F. Torrance (Edinburgh: T & T Clark, 1961), 53.

which attempt self-salvation. In the divine address to humanity which is Jesus Christ we know the divine desire that humans partake of this festive rest in His work. Without the affirmation that creation is a work of grace it can appear that grace is an imposition within a broken creation, not the integral fulfillment of creation. The first Sabbath reveals this possibility for fulfillment as available to humans through human resting in God's action.

Barth further integrates his use of Sabbath as an ethical master-concept by following its threads into the rest of the Old Testament narrative. In CD III.1 he examines God's rest after creation and sees in it "no more and no less than the meaning and intention of the covenant between God and man."[447] Here Sabbath is seen to constitute the keel on which Israelite worship was constructed, because God's rest directly follows and is explicitly linked to the Sabbath that Israel was commanded to perpetually observe. Thus God's Sabbath rest clearly indicates the all-important day of religious observance for the people of Israel. Barth applauds Calvin's observation that Hebrews chapter four makes explicit the Christian knowledge that this keel is Christ. In the Old Testament, God never wearies of recalling his children to Sabbath observance, and at the "climax of that intercourse, He has definitely recalled them in His Son (Hebrews 4:9)."[448] The New Testament church understood that Jesus truly is the one in whom the believer rests, thus fulfilling the Sabbath. It rightly perceived that to convene Christian worship on Sunday was not an innovation but a true memorial of the covenant of grace revealed in God's resting with his human creation in Genesis 2:3, simultaneously a promise and a summons to a great and final Lord's Day.[449] The Sabbath spoken to humanity not only frames the deliberation of Christian moral theology but *is* the eschatological fore-presence of the kingdom of God. As John the Evangelist makes clear, the effect of this fore-presence is to reveal that Sabbath is not a *rest* from human action, but is a *character* of human action in harmony with the divine life.[450]

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[447] Barth, Church Dogmatics, III.1, 218.

[448] Barth, Church Dogmatics, III.1, 227.

[449] Barth, Church Dogmatics, III.1, 228.

[450] John 5: 16-17.

Barth uses the notion of Sabbath as a structure within his theological procedure to hold in tension the content derived from the creation, Christ-event and eschatological moments of salvation history. Having thus linked the meaning of the Sabbath command to the beginning, middle, and end of salvation history, Sabbath is shown as the heart of the covenant which claims believers' whole existence. The radical implications of Barth's theological connections are apparent in his affirmation that,

> If we link the significance of the holy day in salvation history and its eschatological significance, and if we remember that in most instances we are concerned with its relationship to the particularity of God's omnipotent grace, we shall understand at once, and not without a certain awe, the radical importance, the almost monstrous range of the Sabbath commandment. By the distinction of this day, by the summons to celebrate it according to its meaning, this command sets man and the human race in terribly concrete confrontation with their Creator and Lord…which means also the inexorable end of the form of their present existence. This commandment is total…. The command to celebrate the Sabbath, and therefore to cease and abstain from all our own knowledge, work and volition, even from all our arbitrary surrenders and inactivity, from all arbitrary quiescence and resting—this command claims from man that which on the basis of his self-understanding he can understand only as a sacrifice of his human nature and existence, and against which he can really only rebel as life rebels against death… It thus demands of him that he believe in God as his Ruler and Judge, and that he let his self-understanding in every conceivable form be radically transcended, limited and relativised by this faith, or rather by the God in whom he believes. It demands that he know himself only in his faith in God, that he will and work and express himself only in this imposed and not selected renunciation, and that on the basis of this renunciation he actually dare in it all to be a new creature, a new man.[451]

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[451] Barth, Church Dogmatics, III.4, 57-58.

### *Clashing Forms of Life? Weekly Worship and the Work Week*

What is the practical import of this "monstrous" Sabbath claim? Barth was later to write "[W]hen the man who labors and is heavy-laden is summoned to obedience, it creates for him…Sabbath refreshment, rest. He is to honor God and serve him by letting himself be given this rest."[452] This rest, Barth says, is characterized by human action in which the activities of worship and work are firmly integrated with one another. Participation in the worship of the body is the first moment of the Christian life, because in worship the church participates in God's work by making the work of God present in the world. Four clusters of more concrete implications follow, Barth notes. First, such rest claims Christians for the church's communal worship service, for listening to God in thanksgiving. Positively this means that we are commanded to participate in the church's communal worship service; negatively that we are not to approach Sunday as a day free for our disposal, nor a day which we rigidly plan to the exclusion of the breathing room necessary to sustain communal relations. This leads to Barth's second point, that Sunday is a joyous celebration, a fact which should be remembered by the preacher and the congregation alike. We do not "go to church" but we "come together to celebrate and therefore participate in the coming of the kingdom."[453]

Thirdly, continues Barth, Sabbath "is a communal benefit and a communal duty," and cannot be celebrated alone. If we refuse to invest ourselves in the community, it is concomitantly weakened in its task of witness both by our refusal to join in its witness and by our refusal of personal renewal. Finally, Barth concludes, our holy day practice reciprocally indicates our Sabbath life on all days. If we truly rest on Sunday we will rest and be at peace in our work. Conversely, if we are at rest and peace in daily life, our Sabbath rest will be joyful. When Sunday is understood as a duty, a resting from the "important" things of life, we learn that Monday through Friday have not proceeded on the basis of a renouncing faith, and likewise, if we dread Monday, our Sunday has not been spent in freedom. The reward for humans who obey the Sabbath command is that

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[452] Barth, The Christian Life, 31.

[453] Barth, Church Dogmatics, III.4, 69.

they become free from themselves, free from "making themselves" by their work. Having been set free from themselves they are free to be for God—to hear God in the divine service. The whole of Christian life is a traveling down hill from that day of resting with God prefigured from the first day of humanity's living in creation. Thus worship is not simply a rest from work but the source of all right action.

Barth, in understanding worship to be the first ethical implication of Sabbath rather than as a resting from the "real life" of work, correctly emphasizes its role as the celebratory center of the Christian life.[454] The last chapter will have made it clear that I accept his claim that it is fatal for the church to neglect its communal life *and* that the existence of the worshipping church presents a challenge to a world trusting in its own work. Yet we must add a specific criticism of Barth's formulation at this point. His salutary emphasis on Sabbath as command fails to note that it is at the same time the basic experience of God's reconciling and transforming action which Wannenwetsch has so clearly drawn out. Barth at times formulates discussion in ways which make it appear as if Sabbath is an attitude of awareness of what is behind us at creation, or before us as an eschatological ideal to be celebrated and remembered, when both concepts find their true depth when grasped as part of a corporate experience of place before God and in the life of the body of Christ.[455] In this Sabbath the believer experiences the dangerous redundancy of fashioning idols in order to be at peace and in right relation with all things.

If communal life plays a central role in mediating our knowledge of God, then worship is not an ideal to be achieved, nor simply a mode of witness, but a reality which already exists by God's grace, in which we are already involved and which it is our duty to nurture and groom. We must be sure that our talk of worship as celebration, or as the focus of Christian learning about God, does not imply that God's *real* work goes on elsewhere and is simply memorialized in worship, nor fall prey to the reduction of worship to only one day of the week. Having examined how human life is oriented by

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[454] Revelation chapter four makes the eschatological centrality of worshipful praise explicit.

[455] Formally, however, he is strictly opposed to this abstraction of concept and practice. Cf. Barth, Church Dogmatics, IV.2, 35.

Sabbath toward worship, Barth moves on to expound how this orientation of renewed life impacts the daily, mundane habits of the life of work.

### *Clashing Forms of Life? Work and Service*

Having begun with Sabbath as an ethical master-concept, we can approach still closer the question of human remaking of the material world by asking, "What is work?" It has been argued that technology gives us an answer: it is the project of endowing ourselves and our future with meaning. But because through the Sabbath humanity is told that human work is not salvific, we can see why Barth moves from his discussion of Sabbath to indicate the proper aim of human work. That aim, Barth says, is service.[456]

Barth begins by defining work as human action directed at shaping and reshaping the spiritual and material fabric of the universe. Because the praises of worship issue from embodied beings, praise itself contains within it an implicit demand for human work which sustains human life. God in His grace was not indifferent to the creation in Christ but recalled it to wholeness, and our response of gratitude can only be to second God's grace by seconding its redemption with our work. Thus this seconding of God's work by ours is best summed up, Barth says, with the biblical concept of service. Because God Himself was a servant we learn that the renewal of creation is service to others, and thus the activity of our lives which is work rests in God's work by joining in this service. Spiritual service and work are in fact commingled.[457] Work makes worship possible, and worship makes work meaningful, Barth contends. "To live as a man is to fashion nature through the spirit, but also to fulfill the spirit through nature."[458] Barth is not positing a duality here between spirit and nature, because his understanding of action as the primal category of being assumes that 'spirit' and 'nature' are *aspects* of a unitary but never static being.

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[456] Barth, Church Dogmatics, III.4, 523.

[457] Barth, Church Dogmatics, III.4, 471-477, 502, 517-518.

[458] Barth, Church Dogmatics, III.4, 519.

According to Barth, all humans exist within the struggles and toil of a broken materiality, but having been made part of the church (redemption), the believer is shown the purpose of life (eschatology), and commanded to be oriented accordingly. This personal orientation takes place in reference to the integrated order of all beings (creation) in which the believer participates in her place by looking and striving beyond herself.[459] This striving seeks to participate in God's work, which can only be accomplished by respecting the difference between human and divine work. This means, Barth continues, that "the basic form of the active life of obedience…is man's direct or indirect co-operation in the fulfillment of the task of Christian community."[460] The truest and most secular human activity is membership in the Christian community, because it is through the "invasion" of the church into time and space that God binds creation together into a reconciled whole.[461]

By saying that the first action demanded of the Christian is participation in the church Barth assumes a four-fold definition of the church. First, the Christian community is not all of humanity, nor a national church. Second, the church is a people awakened, not an institution. This means, third, it is not a community gathered to receive but is gathered precisely in order to pass on what it receives. And finally, all of its members are called to serve in this giving, not just the clergy. This community's role in the world is first to be those who step out declaring the kingdom, not as spectators but as participants, a declaration only truly made in faith. In this way, the activity of the individual believer is oriented by both the outward action of the church in witness and its processes of inward upbuilding. This work of upbuilding the church establishes the first claim on human work: that a believer maintain his or her own inner spiritual life.[462]

The claim of the kingdom upon human action does not end with this work on one's spiritual state, Barth contends, because the Christian is simultaneously a Christian and a physical being. The first end of humanity is the kingdom, but this end is part of the

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[459] Barth, Church Dogmatics, III.4, 477-478.

[460] Barth, Church Dogmatics, III.4, 483.

[461] Barth, Church Dogmatics, III.4, 482-486.

[462] Barth, Church Dogmatics, III.4, 488-493.

whole of his creaturely being and thus entails physical work. This allows Barth to develop formal definitions of work before moving on to material description. Whether explicitly or not, all humans who work recognize the gift of embodiment and affirm it by working to sustain its existence. Yet this recognition of the importance of human work for maintaining the good which is our embodiedness easily divinizes work or the bodiliness it supports, making them demonic taskmasters. True work takes place only in orientation to God's work, meaning that "man's work cannot be done for its own sake but only in the teleological connection which it is given by God."[463]

On these grounds, Barth says, culture can be understood as a residue of humanity's collective working, a residue which *itself* shapes the way humanity works. This is not to say that culture itself has a "spirit", but to note that culture is the product of human action which reproduces in turn the patterns of life and death which are taken up by future work. Barth's definition of 'culture' might be understood as a theological analogue to Heidegger's 'world'. Good work, Barth says, affirms the creation, or conversely, all work which elaborates the creation toward the coming of the kingdom is good work (a theme which will be elaborated in the next chapter). In this sense we are free to work at many tasks, free to follow our talents and aptitudes to earn our daily bread.[464]

The reality of our need for daily sustenance brings the political aspect of work (the subject of the last chapter) as close as our dinner table, Barth contends: we may preserve our lives in ways which take no account of others, or in ways which are truly human in their respect for the needs of others. Right work, he says, demands that our effort be both a striving for excellence in our particular work, and also be characterized by ongoing attempts to be sure that this work serves proper ends. If our work is good it claims our diligence, if not, our abandonment or reformation of its end. Having said that culture is the sum of the work of the community, Barth indicates that the work of all, from politicians to business people to manual laborers, is grounded and flourishes as the people's work is good, and is degraded as work serves poor ends, even if serving the

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[463] Barth, Church Dogmatics, III.4, 521.

[464] Barth, Church Dogmatics, III.4, 522-526.

immediate needs of the worker by providing a paycheck. Each individual has the responsibility to consider the final product of their labor, understanding that no work is inherently good, as context may decide the actual end that labor serves. Some forms of work are more probably meaningful in all epochs (say, farming, because it is basic to the sustenance of human life), but continual vigilance is needed in the actual context of work, for all work can become bad work.[465]

Having set up the formal framework for making theological judgments about the quality of our work, this chapter will give flesh to this framework in three sections. In the next section Barth further specifies what it means for work to be good, arguing that good work is communal, reflective and playful. Yet these are still formal characteristics, and so in the following section we turn to explicate how good work must be attentive to material order, taking that order as a gift to be explored in wonder and reverence. This chapter's final section will draw all these threads together by looking at two cases in which the formal and material criteria of good work are shown to call forth an ethos which is diametrically opposed to the technological way of being.

As we turn to examine Barth's further specification of the characteristics of good work, we pause to take on board an interlocutor. In affirming that the biblical God created the world because He loved it, and has not revoked that love, essayist Wendell Berry shows himself to be an ally in the search to understand what it means for human action to be attentive to God, neighbor and creation.[466] He is interested in the question of work and the claim of creation on it, and conceives these questions as inescapably social and thus cultural. While we would undoubtedly wish to criticize his formulations at various points, because his work focuses on the specific issues Barth has raised in relation to work, he will help add some detail to the well-developed theological skeleton provided by Barth.[467]

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[465] Barth, Church Dogmatics, III.4, 521-533.

[466] Wendell Berry, What are People For? (London: Rider Books, 1990), 98.

[467] Berry's salutary but often uni-faceted emphasis of the gift nature of creation means that his theological arguments are often built on single-faceted appeals to the holiness of creation. This leads him to speak as if Christianity is important as a religion because it upholds community which affirms the importance of creation, the danger of which is nowhere more apparent than in his claim that belief in Christ is dependent

How then do we judge the value of our work? The first and most basic measure of the goodness of work, Barth says, is that it coexists in harmony with the satisfaction of others' needs. We glimpse in the *koinonia* of the church the promise of human work, that it may take place in cooperation. But most often in our age work is conceived as a struggle for victory over the competitor. The real abuses of competition (not, of course, the only way for work to become destructive) have arisen since the industrial age, Barth claims, and thus Christian praise of contemporary work stands under a definite cloud.

Why can the praise of work in a Christian ethics be only a muffled praise…? *A priori* and positively, as we have seen, it is because the true and primary form of the active life demanded by the divine command is participation in the service of the Christian community. But *a posteriori* and negatively, as we must now add, it is because work as it now presents itself in the history and present state of the process of human labour, and as with a few limited exceptions it is the work of us all, conforms so little to the criterion of humanity that we are well advised to be as modest as possible in this matter.[468]

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on a prior belief in the goodness of creation. See Wendell Berry, Sex, Economy, Freedom and Community: Eight Essays (New York: Pantheon Books, 1992), 95-97. Also, in his salutary insistence on the importance of being temporally present he can disparage all eschatology as inherently destructive.

[468] Barth, Church Dogmatics, III.4, 535. This sorry state of western work is arguably the result of the withering during the late middle ages of theological thinking about the life of work and the management of labor. Disinterest in such questions was related to an abandonment of the practice of monastic labor with the result that the ideal of "morally ordered, non-exploitative, cooperative labor was abandoned by the men who defined the theology of the Christian church. In its place, theoreticians of medieval culture turned to matters of personal transcendence and left the work of the world to social managers, merchants and capitalists. As it turns out, world making is still the business of these men, and the perplexing technological choices [modern society is making] have originated in their view of the way the world should be used." George Ovitt, Jr., The Restoration of Perfection: Labor and Technology in Medieval Culture (New Brunswick: Rutgers University Press, 1987), 17.

Here Berry's thought helps to fill in Barth's call for harmony to exist in our life of work. Modern industrial life, with its speed and danger, rigidly controls the use of space and therefore excludes the young. At the same time the ideal of labor mobility problematizes long-lasting relationships. This is one mark of the rooting of work's telos in an idea of competition. But, Berry points out, good work may also be conceived as communal—*for* a community and *by* a community. Children might, as they once did, be found playing on the margins of adult work, and adult work might strive to take place in shared cooperation. To work in such company can itself be enjoyable; though labor, not *laborious*. The danger here, often realized in the modern telecommuting home-office-work style, is that this insight will again be turned against workers who, rather than receiving the benefit of work at home, instead lose the once protective barrier concept of the private realm.[469] Yet when work is truly communal we are engaged in creation and social life in a way which makes the present truly habitable.[470] In sum, Berry says, developing what might be a helpful paraphrase of Barth, "Good work is not just the maintenance of connections—as one is now said to work "for a living" or "to support a family"—but the *enactment* of connections. It *is* living, and a way of living; it is not support for a family in the sense of an exterior brace or prop, but is one of the forms and acts of love."[471]

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[469] This danger is especially acute for women in lower socioeconomic strata, where work at home is driven by employers' desire to cut overhead costs rather than the welfare of workers. See Sheila Allen and Carol Wolkowitz, Homeworking: Myths and Realities (London: Macmillan Education Ltd., 1987). On the other end of the discussion, when trying to formulate a better view of good work in the present context, we must be attentive to the way *space* is used, and how it interacts with our building a sense of *place*, or rootedness. See Alan Felstead and Nick Jewson, In Work, At Home (London: Routledge, 2000), especially chapter ten.

[470] Berry, What are People For?, 142-43.

[471] Wendell Berry, The Unsettling of America: Culture & Agriculture (San Francisco: Sierra Club Books, 1977), 138-39.

Reflective Work

Barth's second criterion of good work is that it allows reflectivity. The awareness of the relationship between work and service demands ongoing reflection about how the activity of work contributes to the good of those around us. True and good work facilitates this awareness by encouraging the striking of a balance of inner and outer work which allows the worker room for creativity and initiative and thus responsibility and is not simply the physical extension of reflective work done elsewhere. Part of the work of those who manage others' work is to protect the possibility of others' work having this inner side by maintaining its possibility for free initiative. Likewise, Barth argues, workers must take up this possibility by using it to consider their work's meaning and quality.[472]

But for some, Barth continues, work is not mainly physical but predominantly reflective, and these too must consider whether their work is good-creating or not, and if good, whether they devote themselves to it studiously. This reflectivity is the hardest and most essential component of all good work.

> Not for nothing are so many afraid of falling sick or growing old. Not for nothing is the relatively ample time left to most men by the claims of their external work normally used otherwise than for the exercise of reflection and mostly for an escape from it in the various forms of "amusement." If reflection is to be carried through, it demands an effort which can be much greater than that of a woodcutter, factory director or university professor. For the reflection demands honesty, courage and consistency at a point where we would rather be dishonest, cowardly and inconsistent, namely, in solitude. It demands rest where we would rather rush into cheerful or tragic unrest because in rest we might have to face the truth. It demands a step or steps into freedom which we seek to avoid because we know that they will also entail responsibility. In the inner realm we realize that we should be on the high seas instead of a sheltered harbor.[473]

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[472] Barth, Church Dogmatics, III.4, 456-457.

[473] Barth, Church Dogmatics, III.4, 550.

If good work is not only the physical activity of work but also the reflective consideration of its place before God and in the human community, Barth contends, then we can say that the outer work week demands a concomitant "inner work week" consisting in reflectivity about the outcome of our work which takes responsibility for it.

But this inner work week, Berry elaborates, is precisely what the modern project of total control repudiates. The idea of the expert and the project of total control exist in a symbiotic relationship which places strict limits on consideration of the impact of our work.

> The specialist puts himself in charge of *one* possibility. By leaving out all other possibilities, he enfranchises his little fiction of total control. Leaving out all the "non-functional" or otherwise undesirable possibilities, he makes a rigid, exclusive boundary within which absolute control becomes, if not possible, at least conceivable.[474]

The stricter such control, Berry observes, the greater the disorder produced on its margins, "outside its remit." The only antidote to this technological way of being is no longer to ask, as the specialist does, "What can I do with what I know?" without at the same time asking, "How can I be responsible for what I know?"[475] In the new age of the service industry the colonization of the inner work week has become almost complete, and yet the question remains pertinent because, as chapter three suggested, the modern *political* expert is also trying to sever the worker from explicit reflection about, or even awareness of, their work's end.

Here again the practice of the church reveals a startlingly counter-cultural claim to modern practice. Those who are least capable of sustained "production", the sick and the aged, are either discarded or subjected by technological society to regimes to return them to work. Barth points out that, in contrast, in the church the sick and aged are able to pursue the inner work of reflectivity all the more directly. In this we can see work as

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[474] Berry, The Unsettling of America, 70-71.

[475] Berry, The Unsettling of America, 48.

service in its most obviously Christian shape as it may be that the "least of these" may greatly affect the shape of the church's participation in society through its work by sharing their wisdom and counsel with the body. This service is vital for the community of faith, and thus the end of a "career" is not an invitation to become idle. "Aging among Christians," comments Hauerwas, "is not and cannot be a lost opportunity, but rather is a transformation of what the world understands to be a loss of power into service for the good of the Christian community."[476]

Playful Work

Finally, good work, Barth says, is playful. Fulfilled work, while it frees humanity, does so only because it knows its proper context and thus its proper limit. If humanity is only truly free in service, then the service of work has its limit in the service of the church's corporate worship, the "impractical" joyful praise of the body of Christ. Without the joyfulness of worship and the playfulness of rest outside of work, we cannot but fall prey to the belief that our work sustains the good, drawing us into the empty and inordinate desires of competition, the affliction of pride. Good work is the child of the de-totalization of work and is thus freed for the risky creative service of joyful delight.

Play, Barth says, is the inhabitation of God's desire to create beings who are not locked into work and competition but are free in the service of the community. When we have developed the skill of playing and worshipping and wondering outside of work, we can see that right work too is service only as play, "i.e., a childlike imitation and reflection of the fatherly action of God which as such is true and proper action." We are freed from the compulsion to "make the future" by inhabiting Christ's command not to be anxious about life, sustenance, or the morrow. Such playful work requires periods of idleness which rejuvenates our service. Of course this idleness must also conform to the law of Sabbath, and thus is more akin to wonder than decreased reflectivity. If our work is

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[476] Stanley Hauerwas, A Better Hope: Resources for a Church Confronting Capitalism, Democracy, and Postmodernity (Grand Rapids, Mich.: Brazos Press, 2000), 185.

too frantic, leaving no energy for a hobby or side interest, this too calls for our reflection, raising the possibility of casting off on the high seas rather than remaining in the calm but deadening harbor in which we by our work have anchored ourselves.[477]

What might playful work look like? "[W]e must learn to think of human energy, *our* energy, not as something to be saved, but as something to be used and to be enjoyed in use," Berry contends. If we know how to enjoy play as Barth advocates, we will learn to enjoy work, says Berry. "There is no such thing as a reservoir of bodily energy. By saving it—as our ideals of labor saving and luxury bid us to do—we simply waste it, and waste much else along with it."[478] Only as play can our work become rejuvenated. "The nearly intolerable irony in our dissatisfaction is that we have removed pleasure from our work in order to remove "drudgery" from our lives."[479]

Work undertaken in rest, Barth explains, will have a composure about it, not engaging in superfluous activity for activity's sake, nor simply with one eye on the competitor, but having a well-discerned understanding of its meaning as part of the good of society. The power of Christian work is that it is given a telos and can therefore prioritize its aims in a way which yields resources for resisting their ordering by the capitalist imperative of survival. Barth singles out for criticism the frenzied irrelevance of modern diplomatic practice and the tendency of Christian publishing to allow quality to be undermined by the newfound capabilities to produce quantity. Both, he perceptively notes, have lost their orientation in relation to a purpose and have become self-referential industriousness which is not only ineffective but counter-productive in the terms of the work itself. This ineffectiveness is the result of ignoring the inner work which is the essential component of any right outer work.

The rest from physical work which is necessary to engage in this all-important inner work relies on the acknowledgment that only God can transform our work, Barth contends. Such reflection begins with the effort to lay aside the frantic, focused activity which accompanies work, and thus becomes the quietness and stillness into which God

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[477] Barth, Church Dogmatics, III.4, 550-553.

[478] Berry, The Unsettling of America, 219.

[479] Berry, What are People For?, 141.

can speak. "The achievement of true rest is really a matter of pure receiving."[480] This reflective and attentive receiving makes it possible to hear the speaking of God through the challenges of work, and through the suffering of love and trials which are part of life in the worshipping community. Without this resting, this listening in supplication, our work will become futile, Barth notes. In becoming detached from its real end, God's praise, it becomes attached to the cares and competitions of this world.[481]

If good work is characterized by this attentiveness to God's claims on our action, it will, Berry adds, go forth to enact affection and give honor, calling forth the same from others' work. Yet precious little work is of this type, he observes. "All of us are responsible for bad work, not so much because we do it ourselves (though we all do it) as because we have it done for us by other people."[482] Conversely, our striving to define and enact good work calls forth other good work because it takes place in a social matrix. Christian work, then, gives honor to God because the skill or craft of work is good in both being attentive to its created material and in its desire to serve God by serving fellow creatures. Berry adds: "Any life, by working or not working, by working well or poorly, inescapably changes other lives and so changes the world. This is why our division of the "fine arts" from "craftsmanship," and "craftsmanship" from "labor," is so arbitrary, meaningless, and destructive."[483] If work is not art, meaningful because good service, then "we are wasting our lives, and our work too."[484]

On one side, and in relation to Part I, Barth can be interpreted as indicating that because our salvation is in Christ, the Christian has reason to repudiate business or national claims that work demands a permanent or regular footing on an emergency or crisis basis. Refusal of the messiah complex of work is critical, and often technical requirements call forth the greatest compromises of this priority. Whether or not we are sure about the positive meaningfulness of our work, we know the consequences of the

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[480] Barth, Church Dogmatics, III.4, 564.

[481] Barth, Church Dogmatics, III.4, 554-564.

[482] Berry, Freedom and Community, 36.

[483] Berry, Freedom and Community, 110, 112.

[484] Berry, The Unsettling of America, 78.

missed deadline, letting the assembly line stop, or the deal fall through. In these moments we relinquish the proper limit to work because we have internalized an employer's definition of performance.

On the other side, Barth argues, because work's limits frame human recreation, the mechanization and mindlessness that produce bad work also produce meaningless or joyless play. "Our workplaces are more and more exclusively given over to production, and our dwelling places to consumption," Berry concurs.[485] The antinomy of modern life strips both play and work of meaning, and Barth has indicated that good work which rests in Christ reasserts their proper relation and integration, but the rise of the "pleasure industry" indicates the rejection of this integration, Berry points out: "That there can be pleasure industries at all, exploiting our apparently limitless ability to be pleased, can only mean that our economy is divorced from pleasure and that pleasure is gone from our workplaces and our dwelling places."[486]

As chapter three noted, the spectacular plays a central role in contemporary modes of entertainment, and it is important to observe the growth and shape of the cultural constellation known as entertainment, locate its essentially technological substrate, and its tendency to promote decreased moral reflectivity as indicated by the widespread use of the term "mindless entertainment." The physical expansion of the "entertainment center" in the modern living room is paralleled by the global expansion of the industry devoted to satisfying (or creating) modern claims for ever more consumable entertainment. By focusing on the technologies of the entertainment center, and the yearning for more complete escapes into virtual reality, we can grasp the life it embodies and claims, unmasking the reality that "mindless entertainment" is in fact an active habituation to a state of decreased moral reflectivity.[487] Knowing the cultural artifact of the entertainment center frees us to respond to it in our own lives, to get a handle on how to name the social

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[485] Berry, What are People For?, 134.

[486] Berry, What are People For?, 134.

[487] Despite a tacit acquiescence to the mandates of the technological imperative (172), and his espousal of an instrumental view of technology (180-81), this point is touched on by Graham Houston in Virtual Morality: Christian Ethics in the Computer Age (Leicester: Apollos, 1998), 177.

presence of certain industries, and to imagine a very different interaction with these objects, if they can be understood to serve true, rejuvenating, communicative, reflective and connective play.[488]

In summary, good work as Barth has developed its definition, is communal, reflective and playful because it does not conceive itself as enacting self-salvation but as glorifying God. It is grounded in God's love for us and the creation, and is thus attentive to all of creation and to the speaking God. In this way work becomes joyful because not gripped by over-earnestness, yet is characterized by the application of attention, time, and thought. Only two tasks remain: to explicate what is implied in the claim that good work is attentive to the order of creation, and to summarize the chapter's arguments by reference to two cases.

***The Love of Natural Order as Gift***

Heidegger argued and Grant repeated in ringing tones that the problem of technology could only be met by a theory which allows the beauty of natural order to call forth human love. This section will indicate both why Christian moral reflection must *begin* from just such an awareness and what the practical implications might be on human work. This penultimate subsection begins from consideration of the import of the Christian affirmation of God as Creator, and will home in on some of the implications of this claim by drawing out its impact on the way we eat and procreate, and the work that sustains good eating and procreation. This will lead directly on to the two cases which summarize the chapter.

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[488] Bernd Wannenwetsch has developed a theologically astute schema for dealing with such questions which builds on the critique given here by noting that communication which has ceased to be transformative of both parties tends to be oriented by its lowest common denominator, the optimization of technical means. Bernd Wannenwetsch, "Communication as Transformation: Worship and the Media," in Studies in Christian Ethics, vol.13:1 (Edinburgh: T&T Clark, 2000), 105.

Barth's discussion of the meaning of Sabbath has indicated the perspicuity of Hauerwas' claim that "we do not believe that 'creation' is something that all people can affirm. Rather, the confession of 'creation' is something made by a group of people who are called to be the church in a world of people who do not in fact know that they are 'creatures.'" The faithfulness of the church consists in living in such a way that the bondage of creation is revealed and mitigated in favor of its sacred capacity for peace.[489] The basic question pressed on us by the Christian doctrine of creation is, "How are our bodies to relate to other bodies and all materiality?" Because creation is a *doctrine*, this question becomes a religious question, implying that there are deep inner connections between the way we treat our bodies and the way we treat the earth. What are the outlines of this doctrine and how does it indicate a divine claim on human action?

The doctrine of *creatio ex nihilo* has three basic specifications, argues Christoph Schwöbel. First, we can speak of God without creation, meaning that God has a free existence which contrasts with creation's dependence. Second, God is involved with His creation which is derived from the overflow of His Trinitarian love. On one side God did not wind up a clockwork world to leave it alone, and on the other He has granted it a form of stability. Creation, because it derives from the Trinitarian love, is part of God's story, yet God does not need another partner to be fulfilled. Finally, creation is an integral part of divine action, meaning that it is a complex act. Supremely, "The recognition of the eschatological ultimacy of salvation leads to an understanding of creation as mediated by, integrated in and ordered toward Christ." At the same time creation is the work of the Father and a participant in the ongoing work of the Son.[490]

These affirmations lead Schwöbel to assert a distinction between c*reatio* as God's act of creating, and *creatura* as the result of that act, a distinction which establishes that; "Seeing the world and ourselves as agents, as created, as the result of God's absolute giving, restricts our objective and subjective possibilities of action in such a way that it

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[489] Hauerwas, In Good Company, 191-195.

enables their success. The restriction that is demanded is precisely that we refrain from interpreting our relationship to the world in terms of absolute creativity."[491]

Michael Banner has argued that Augustine's account of sexual ethics indicates two important ways that the creature's work can ignore this productive distinguishing between human and divine work. In addition, Banner contends that Augustine's account is methodologically paradigmatic because it attempts to situate human procreation within the framework of salvation history. In doing so, Banner says, Augustine saw clearly the rejection of the claim of creation on human action by the Manicheans. They denied that the natural is possessed of any moral significance, so denying the goodness of the work of the Creator. They and their contemporary representatives "presuppose that our bodily life is not possessed of a form or character which comes from the hand of a good God."[492]

Creation was also improperly loved, Augustine argues, by the Pelagians, who believed humanity's drives to be basically good, so denying the work of the Redeemer. This led, Banner notes, to a superficial view of the brokenness of creation giving Pelagians an over-optimism about the possibility of eradicating all sin and evil by remaking social habits and materiality.[493] Because the Manicheans and Pelagians wrongly related the creator and creation (as Heidegger also did in loving creation as *itself* the creator), each is unable to correctly conceive the proper, *creaturely* form of human action. Understanding this properly formed human action, we now turn to imagine a proper, formed and informed love of creation.

## Sex and Food

In the course of these observations it becomes theologically interesting that the worship of the Israelites was linked by the Torah to a fine-grained set of ethical claims

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[490] Schwöbel, "God, Creation and the Christian Community," 159.

[491] Schwöbel, "God, Creation and the Christian Community," 173.

[492] Banner, Contemporary Moral Problems, 281.

[493] Banner, Contemporary Moral Problems, 21, 287.

relating this worship to their eating habits and their sexual practices. The New Testament is no less concerned than the Old Testament to understand sexual practices and eating as powerful sites of social contest within which Christians either accept or challenge wider social patterns.[494] Though the religious meaning of the Israelites' and the New Testament Christians' sexual and culinary practices appear to vary in scripture, it is remarkable that eating itself remains a constant source of attention for the writers of scripture as they attempt to elucidate the ethical implications of being God's chosen people. This dual emphasis will similarly focus discussion here. Like the chosen people of scripture, we need not be too surprised to see that the way we eat and the way we have sex may be intimately connected with our worship. The main text in this section, the creation story, frames this dual focus in portraying humanity's relation to creation in terms of the creation as a dinner table, and humanity's blessing in terms of reproductive success.

Wendell Berry is also interested in the connection between eating, or agriculture, and sexual practices. He claims that study of these connections is fruitful because they "are our basic connections to each other and the earth, and they tend to relate analogically and to be reciprocally defining: our demands upon the earth are determined by our ways of living with one another; our regard for one another is brought to light in our ways of using the earth."[495]

We saw in chapter one Heidegger's interest in work being guided by the order of the earth. His reflections on the claim of created order on human making spring from his early interaction with the Christian tradition's attempts to specify that order.[496] He was reacting to the high medieval canon lawyers' attempts to develop a fine-grained and timeless schema of these natural divisions for use in moral theology. Heidegger so fully rejects the timelessness of natural order in the interest of the multiplicity of the earth's orders that his ethic becomes uselessly vague, whereas Oliver O'Donovan has much more fruitfully engaged with this same Christian tradition.

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[494] 1 Corinthians 5-8, for instance, is clearly concerned with both questions.

[495] Berry, The Unsettling of America, 131.

[496] John D. Caputo, Heidegger and Aquinas: An Essay on Overcoming Metaphysics (New York: Fordham University Press, 1982), especially chapters 1-3.

As we look at the issues of sex and eating, let us briefly examine O'Donovan's use of natural order to ascertain whether it is appropriate for technological science to turn a woman into a man (or vice versa) by surgical technique. Christians, O'Donovan begins, because they acknowledge that creation is good, celebrate the fact that humans come into existence dimorphically differentiated. Marriage as an institution recognizes this difference and fits it into the broad sweep of human life. In Genesis this biological differentiation is interpreted as a created order, ratified by Christ in the gospels and consummated in the institution of marriage which "disclose[s] the goodness of biological nature by elevating it to its teleological fulfillment in personal relationship."[497]

But, O'Donovan notes, modern Manicheans don't consider this differentiation a *gift*, but a *problem* to be overcome. They often point to the spectrum of social gender to problematize the clarity of biological sex, but O'Donovan replies that masculinity and femininity exist as a spectrum in a way biological sex does not. Rather, he says, fixed biological sex makes possible the rich social differentiation of gender because of the tensions set up between the fixed poles of biological dimorphism. And at the center of this interplay the structure of marriage elucidates its full created wholeness.[498]

In affirming that sexual difference is a created good, Christians are not at the same time saying that sexual difference may not also take on the aspect of a problem (as in hermaphroditism). They *are* saying, however, that this problem is qualitatively different from the modern technological problem which asks how human work can overcome any material obstacles in its quest to make meaning out of meaningless materiality. Here, O'Donovan concludes, the self is destroying itself in "sinning against one's own body" (1 Corinthians 6:18).

Self-transcendence, in which the spirit may view the body as an object for thought, has not led, as it ought, to the recognition of the body as self and the acknowledgment of self as obligated to the body's form; it has led to the reduction of the body to undifferentiated matter, on which the

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[497] O'Donovan, "Transsexualism and Christian Marriage" in Journal of Religious Ethics, 1st ed., vol. 11 (1983), 141.

[498] O'Donovan, "Transsexualism," 142-43.

spirit proposes to exercise unlimited freedom. In this way we confront the possibility of self-manipulation which is self-falsification; and we discover it to be based on precisely that abolition of complementarity between the body and the soul which was being recommended to us in the interests of a unified conceptual field.[499]

O'Donovan is prescient in delivering this clear and important No to those who refuse creation as a gift, and to a church under the technological imperative hankering to validate it. At one level the church must be prepared to let the world go its own way, in the knowledge that the sin against the Creator of Romans chapter one is to claim that creation is "merely there", without any divine interpretation. Paul asserts that the punishment for this sin for those who take this route is to be handed over to the consequences of their refusal of God.[500]

But at another level, the focus of this study is to pinpoint the divine Yes of created order (linked here as it is with the revealed form of Christian marriage), toward which O'Donovan has so clearly gestured. God is gathering up his community and transforming it, not only by naysaying, but in imparting true, positive Christian knowledge of the world.[501] We will come to see that a socially creative response to the creation as gift speaks from the conviction that creation was meant to be admired as God's handiwork *before* it was understood as something to be used.[502] Fear, awe, reverence, humility, delight and joy—the mathematical or technological way of being ties these to wonder at human power, or the work of its hands, but not to the cosmos as creation. But if creation is a gift, holding complete within it the possibilities of true human flourishing even in its brokenness, then our delight and joy in it reinvigorates our work with living, creative possibility.

We turn now to a last look at Barth's exposition of Genesis which develops how a species of "loose idealism", or moral idealism, might allow a fruitful listening to, and

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[499] O'Donovan, "Transsexualism," 151.

[500] Bernd Wannenwetsch, "Old Docetism—New Moralism? Questioning a New Direction in the Homosexuality Debate," in Modern Theology, 16:3 (July 2000), 357-58.

[501] Barth, Church Dogmatics, IV.3.1, 214.

[502] Berry, What Are People For?, 138.

working with, the gift of created order which does not impose its knowledge but has sufficient formal knowledge to orient its material exploration. Barth's linkage of our work, eating, and procreation via the creation story will complete this subsection, as we turn in a concluding subsection to consider Christian forms of agriculture and sexual life.

### *Karl Barth and the Creation Narrative: Genesis 1:24-31*

Having looked at the importance of the seventh day of the creation account, let us return with Barth to hear God's word on the sixth day, the oft-discussed command to "be fruitful and multiply and subdue the earth" (Genesis 1:28). The command follows the description of God's creative work on the sixth day (Genesis 1:24-31), which began with God creating all the land animals.

By setting the creation of humanity in the context of the creation of the other land animals, Barth points out, humanity is not pictured in isolation from, or as superior to, but in the company of the other animals with whom he was created. The land animals and human beings are so intertwined in creation that they share the reproductive blessing with humanity.[503] Yet God immediately distinguishes humans from animals by establishing human dominion over all other animals (v. 26). The source of human glory is not this dominion, but the direct correspondence of humanity to God as God's image-bearers. The Trinity in unity ("let us", v. 26) wills to create a new being corresponding to that unity and separation, and thus capable of conforming to the divine life.[504]

In this way the divine "us" creates a human "us"—"male and female He created them" (v. 27). The God who speaks of Himself as plural speaks into existence creatures who can enter into free covenant relationship with Himself and with each other because they have been created in this plural image. In this way man "repeats in his confrontation

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[503] Barth, Church Dogmatics, III.1, 177.

[504] Barth, Church Dogmatics, III.1, 183. This is a contested, but not an obscure reading of the much disputed Genesis 1:26. For a good survey of rival readings dealing explicitly with Barth's position, see Gordon J. Wenham, Word Biblical Commentary: Genesis 1-15 (Waco, Texas: Word Books, 1987), 27-34.

of God and Himself the confrontation in God."[505] By juxtaposing "let us create" with "male and female He created them" the relationship of the sexes is revealed as a critical social locus at which a single order of physical difference is shown to be morally and theologically crucial.[506]

The command to rule over the animals fits within the establishment of humanity as being in God's image which marks humanity as designated to live God's presence among the creatures, Barth continues. "Man is not their creator; hence he cannot be their absolute lord, a second god. In his dignity and position he can only be God's creaturely witness and representative to them…man's lordship over the animals is a lordship with internal and external limitations."[507] The internal limit of human lordship is the good of other creatures, its external limit God's sovereignty over both.

It is interesting to note, Barth continues, that God's spoken command is directed only to humans. This is because "man needs God's blessing when (animal-like in this respect) he moves forward as male and female to the procreation of new individuals, to the multiplication and expansion of his kind; and when (God-like in this respect) he again moves forward as male and female to the exercise of this lordship."[508] This command is the beginning of God's history with man in which God accompanies and guides man by both His presence and His word of blessing, permission and promise.[509]

According to Barth, the goodwill God shows to humanity in this blessing is reconfirmed in His provision for humanity after the Fall, through punishments designed to draw humans back into the form of the blessing. But the firmest proof that their lordship as God's image is blessed is that their marital union becomes the image of Christ and His church. Even here at creation, before the man and woman are aware of it, their

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[505] Barth, Church Dogmatics, III.1, 186.

[506] Barth, Church Dogmatics, III.1, 196.

[507] Barth, Church Dogmatics, III.1, 187.

[508] Barth, Church Dogmatics, III.1, 188.

[509] Barth is again not alone in this reading. Contemporary Jewish and Christian biblical scholarship confirms Barth's reading of the import of the blessing as speech, both unifying humans with the animals and setting up fertility as a task. Cf. Jeremy Cohen, "Be Fertile and Increase, Fill the Earth and Master It": The Ancient and Medieval Career of a Biblical Text (New York: Cornell University Press, 1989), chapter one.

activity *as* man and woman points beyond them toward the Son of Man and His community.[510]

The central point of the language of "God's image", Barth says, is that God willed to create a being who, while unlike God, mirrored God's own knowledge of Himself. It is Paul, Barth contends, who draws out the importance of this connection, understanding man and wife together as God's image (1 Corinthians 11:7) and therefore understands Christ not as the isolated culmination of the image of God but always as Israel's Christ, husbanding the community of faith. For human beings to fully inhabit the image for which they were created they must be participating in Christ's body by the quickening of the Spirit who fulfills the Creator's wish to create men in His own image.[511]

In understanding the *imago dei* in this way, Barth points out that humans' image-bearer status is fulfilled by hope in God alone. The answer to this hope is the divinely provided cosmos which supports human life. "I shall give you every plant…you shall have them for food" (v. 29). "[I]t is an incontestable and unshakable sign of the real grace of God addressed to him," Barth says, "that the cosmos is a home prepared to satisfy his own and his fellow-creatures' needs, to nourish him and them, and in this way, when existence has been given to them, to assure their continuation as the presupposition of the activity assigned to them."[512]

The framing of this gift of sustenance to humanity makes it clear that they do not possess the power of dominion over the vegetable kingdom by right but are given it as food, Barth continues. God has spread a table for humanity, and human life must be marked by an acknowledgment of that gift. "Give us our daily bread" is a petition which recognizes the relation of humanity to their food and to God, and is an acknowledgment that God will not fail humanity in this provision. Man is invited first to this table to make

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[510] Barth, Church Dogmatics, III.1, 189-191.

[511] Barth, Church Dogmatics, III.1, 197, 203-204.

[512] Barth, Church Dogmatics, III.1, 207.

it clear that creation is the home of humanity, the covenant holder with God, Barth notes, yet man is not at this table alone because all creatures are invited to share it.[513]

We need not be surprised, Barth points out, that the original order of creation was strictly vegetarian, living off only the fruit and seeds of plants. Humans were sustained by the superfluity of the plant kingdom, eating without killing. Despite the intervention of the Fall, this peaceable early state was remembered in the Old Testament's prohibition of the eating of blood and of homicide. The divine command to kill animals in sacrifice established the violence of killing as part of the post-Fall condition, yet Barth understands verse 29 to convey that the nourishment of one creature at the expense of the other "does not correspond to an original order and will not therefore correspond to a final."[514] This does not mean that the final new creation will be a return to the first, but establishes meat eating as an allowable concession. The primary thrust then of vv. 29-30 is not to establish vegetarianism but to mediate man's dominance over earth by showing the interreliance of man and animals on the vegetative, all of whom have the same necessity, means of support, and command.[515]

"God saw everything He had made" the passage concludes, "and indeed, it was very good" (v. 31). All creation, Barth states, was adapted to the purpose which God had in view for it. It was well-stocked to support humanity in obedience to the covenant of grace.[516] The food was prepared, the table was set, humanity was given to eat. Stephen Webb well summarizes the biblical tradition, saying that it "balances two potentially opposed viewpoints; it allows for the use of animals even as it insists that they are worthy of God's justice and mercy."[517] Humans are asked to subdue the earth, to fill it with their

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[513] Barth, Church Dogmatics, III.1, 207-208. As we will see, this attitude of *receipt* is the missing component of modern agriculture, which is conceived as extraction, with humanity alone at the table.

[514] Barth, Church Dogmatics, III.1, 209. "It is exceptional that a pastoral people who lived on meat, dressed in animal skins, and wrote on parchment…should bequeath to the world a vision of an original and an ultimate vegetarianism." Stephen H. Webb, On God and Dogs: A Christian Theology of Compassion for Animals, forward by Andrew Linzey (Oxford: Oxford University Press, 1998), 135.

[515] Barth, Church Dogmatics, III.1, 211-212.

[516] Barth, Church Dogmatics, III.1, 212-213.

[517] Webb, On God and Dogs, 23.

offspring, and to do so in thankfulness. The promise of God "setting the table" for human sustenance is a permission for and shaping of human gardening, just as God's blessing humanity with fecundity frames their perception of the meaning and ordering of sexual life. This chapter concludes by making explicit how these theological insights about human eating, dominion and procreation might be understood in a contemporary, technological social context.

## *Clashing Forms of Life? The Eating Complex*

### Environmentalism

What does it mean to say that good work has love for the goodness of creation? We might respond by pointing to environmentalism, yet this term's weakness is its conception of the earth as "life support" for humans. This weakness betrays the estrangement from, or over-identification with, our own creatureliness which also underlies terms like "biocentric" or "anthropocentric" or "deep ecology." Each term either perpetuates a false polarity which sustains our destructiveness and estranges us from the materiality of our own particular and intimate dwelling place, or so identifies human action with the processes of nature that it cannot develop normative claims.[518]

The concept of conservationism is likewise fatally flawed. The conservation of "scenic resources," for instance, places the sphere of our sympathy with creation outside the reach of our daily lives. In addition, conceiving ourselves as conserving "natural resources" exacerbates the technological habit of treating both renewable and non-renewable resources in the identical fashion: as reservoirs to be conserved for strip-mining at a later date. There is also a "realistic" conservationism which aims at stopping the worst abuses of capitalism, yet it also fails to see that the larger abuses of capitalism are the result of a pattern of smaller abuses which a focus on "ecological disasters"

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[518] Berry, The Unsettling of America, 22; Berry, Freedom and Community, 34-35.

hides.[519] The conclusion of Michael Banner is that the debate about whether ecological reform is for the sake of humans or the sake of the "environment" which supports them can only be resolved by a "proper account of human well-being [which] would allow us to understand something of the unreality of the contrast which the debate in environmental ethics has tended to assume."[520] We need then to bring love of creation closer to the everyday events of our lives than the concept of environmentalism allows.

## Husbandry vs. Agribusiness

### Christian Presuppositions of Agriculture

In the preceding discussion of Sabbath, we traced Barth's argument that our work is good when it does not attempt self-salvation but relies on God's work of creation as sufficient for meeting human needs. But the rhetoric of technological medicine and agribusiness, Berry points out, begins its discussion of potential new technologies with the opposite logic—emphasizing threats facing humanity which only humanity can remedy: "people are starving" or "people are dying of disease" are assumed to provide the mandate for immediate investment in the development of investment-intensive medicine and agriculture.[521] Such threats on one hand call forth a Promethean and totalitarian council of perfection, embodied in the destructive absurdity implicit in Hans Jonas' admission that his ethic demands a totalitarian world government in order to stop the destruction of the planet.[522] As chapter three has also argued, they may, on the other hand, end in a paralysis of moral sense, a ceding of control by the masses to the promisers of fantastic technologically-enhanced benefit.

Christian theology, based on the sensitivities developed out of its primal story, has reasons to sense the totalitarian drift of such claims. In the creation narrative, God curses the ground (Genesis 3:17) as punishment, but in the punishment is promise: "[F]or the

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[519] Berry, Freedom and Community, 27-30.

[520] Michael Banner, "Why and How Not to Value the Environment" in Contemporary Moral Problems, 184.

[521] Berry, The Unsettling of America, 65.

[522] Jonas, The Imperative of Responsibility, 151.

creation was subjected to futility, not of its own will but by the will of Him who subjected it in hope…" (Romans 8:20). God cursed the ground because He wants us *not* to be at rest, to feel we have overcome a creation which is still racked by evil. The desire of the technologist is to overcome, to settle and conclude this struggle prematurely in rejection of the claim that this conclusion can only be brought about by God. But by beginning our thinking with acknowledgment of creation as a good gift to be enjoyed and respected, ethical deliberation can wait in active hope for God's redemptive work rather than being driven to paralysis or hubris out of horror at the effects of the Fall. That horror makes wonder impossible, and without wonder work cannot be good. And by beginning deliberation with creation as a gift we are certainly allowed to take seriously its dissolution, its suffering, its deprecation.

A Christian agriculture which refuses this Promethean project, Berry suggests, is based on the premise that "creation is a unique, irreplaceable gift, and therefore to be used with humility, respect and skill."[523] Rather than beginning with the theoretical and abstract long term worries of the environmentalist, such work seeks a right relation of people to the earth, in which all humanity's neighbors become part of the discussion.[524] If the human relation to material order is understood in this way, it understands that there is no such thing as autonomy, only responsible and irresponsible dependence, both on one another and on our materiality. Such work opens up connectivity between these spheres, as attention and care is paid to the physical medium of our communion.[525]

Human neighbors, animals, plants and the land each impose their own rules for care on us, and will be degraded if cared for in any other way, Berry, an experienced farmer, notes. To properly care for them requires strong motivation and close attention. To care well for something it must be loved in the concrete.[526] In relation to agriculture, this implies the corollaries that people must have a reasonably secure tenure on their land

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[523] Berry, The Unsettling of America, 213.

[524] Berry, Freedom and Community, 15.

[525] Knight, Douglas. "From Metaphor to Mediation: Colin Gunton and the Concept of Mediation." In Neue Zeitschrift Für Systematische Theologie und Religionsphilosophie 43 (2001) 127.

[526] Berry, What Are People For?, 6, 9.

so that they can see the fruit of their labor, and because a minimum amount of attention is required to care well for a given piece of creation, there are boundaries to the amount which people can own and properly care for.[527]

This latter observation links us again with the criterion of good work which Barth has already established: that it demands love and attention. Husbandry is inescapably particular, Berry says, and to seek to treat every animal or every field or every part of a field equally is the mode of technology. The task creation claims us for is to live well in *my* place in the world, which demands an attentiveness which, when applied to the farmer, is called husbandry, which rules out his understanding himself as a banker, production expert, etc.[528]

## Technological Presuppositions

In examining Berry's understanding of the priorities which Christian agriculture will uphold, we begin to see a contrast between what may be labeled a gift ethos with an analogue of Heidegger's technological ethos of the standing reserve. Nowhere is this more clear than in Berry's contrast between the technological and husbanding mindset.

> I conceive a strip-miner to be a model exploiter, and as a model nurturer I take the old-fashioned idea or ideal of a farmer. The exploiter is a specialist, an expert; the nurturer is not. The standard of the exploiter is efficiency; the standard of the nurturer is care. The exploiter's goal is money, profit; the nurturer's goal is health—his land's health, his own, his family's, his community's, his country's. Whereas the exploiter asks of a piece of land only how much and how quickly it can be made to produce, the nurturer asks a question that is much more complex and difficult: What is its carrying capacity? (That is: How much can be taken from it without diminishing it? What can it produce dependably for an indefinite time?) The exploiter wishes to earn as much as possible by as little work as possible; the nurturer expects, certainly, to have a decent living from

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[527] Berry, Freedom and Community, 3-4. This insight has a long history and a Christian tradition, seen clearly, for instance in St. Thomas Aquinas, Summa Theologiae, vol. 38, Iniustice (Questions 63-78) (Oxford: Blackfriars, 1975), IIa IIae Q.66 A.3.

[528] Berry, The Unsettling of America, 31, 34-35.

his work, but his characteristic wish is to work *as well* as possible. The competence of the exploiter is in organization; that of the nurturer is in order—a human order, that is, that accommodates itself both to other order and to mystery. The exploiter typically serves an institution or organization; the nurturer serves land, household, community, place. The exploiter thinks in terms of numbers, quantities, "hard facts"; the nurturer in terms of character, condition, quality, kind.[529]

If we conceive human work as the rearrangement of the energy flows of creation, Berry continues, technology is the presupposition that this energy is best understood as something produced and used and thus speaks in terms of conservation of the consumable. But, he contends, the order of biological energy from which our own lives are sustained requires a third term: return. Return links consumption with production in a much more complex and less individualistic way. Agriculture as a cultural discipline attuned to this aspect of reusability of biological energy has in practice been marginalized by agribusiness whose first move was to conceive biological energy as a store of energy extractable by machinery.[530]

Such a system of agriculture, Berry points out, is modeled on economics, thinking and acting in terms of consumption/waste patterns rather than in terms of a cycle of renewal. Such industrial agriculture does not listen to the land, nor does it wish to until its project of return maximization exhausts the land. The two approaches to the health of creation are husbandry, as a particular conversation with a particular piece of creation, and production, which uses chemicals and machines to make all soil and terrain equally hostile to anything but monoculture. Industrial agriculture is inextricably tied to the measure of production, husbandry to the desire to use land well.[531] Again, we hear a resonance with Foucault's exposition of modern political technique, which functions by denying the importance of particularity, as it seeks control by the disassociation of parts so that they may be treated in standardized ways.

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[529] Berry, The Unsettling of America, 7-8.

[530] Berry, The Unsettling of America, 81-89.

[531] Berry, The Unsettling of America, 137; Berry, What Are People For?, 206-209.

## Good Care of the Earth

If honoring creation entails repudiation of important presuppositions of modern agricultural practice, what type of practice is called forth? Modern agriculture (like modern political technique) aims at homogeneity to produce material efficiency, Berry argues. It repudiates the wild, substituting the principle of uniformity for the principle of diversity. Ancient or "primitive" agriculture uses the diversity of the crop gene pool to circumvent undue losses due to insects and disease. Its methods are based upon the principle of diversity, and thus it is more sophisticated, soil conserving, and resistant to crisis than technological agriculture. This variety depends on appreciation of and reliance on the diversity of "wild" versions. In short, it attends to and values the survivors.[532]

This emphasis on the importance of the principle of diversity, contends Berry, is not meant to imply that the mechanization of farms is the enemy, but that the industrial method which produced the tractor cannot be applied wholesale to organizing all the processes of the farm without significant degradation of its health. The main issue is to apply the right standard in attempts to gauge agricultural performance: health vs. productivity. Production and its goals will always be inimical to reproduction. Again the terminological contrast is important; agri*culture* intimates the essential components of ritual and attentiveness in the way agribusiness, agriscience, and agridollars do not.[533]

## Industrial Agriculture

It should come as little surprise by now that the type of contemporary agriculture that draws Berry's protest fits very closely the profile of technological practice developed

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[532] Berry, The Unsettling of America, 177-180. An excellent example of the difference such thinking makes is embodied in the attempt of the Floral and Nursery Plants Research Unit of the U.S. National Arboretum to respond to the North American Dutch Elm epidemic. Rather than investing in engineering disease resistant strains, the unit is combing the United States to find trees which survived the epidemic, from which seedlings are being grown. Phil McCombs, "Making a Stand," The Washington Post, July 30, 2001, C1.

[533] Berry, The Unsettling of America, 87, 194, 204, 217.

in Part I. He recounts in great detail how "modernized" farming focuses on material, mechanical possibilities for the "farm of the future", forgetting the social offshoots of proposed changes to farming. He traces how this takes place under the same desire to make the future that Grant articulates. Such a logic defines itself by being *against* the promotion of diversity and is thus inherently totalitarian, reasoned with only by force.[534] Like all totalitarianisms it lacks imagination. What is the solution to drought? To have agribusiness engineer more drought resistant plants. Such inflexibility illustrates that modern agribusiness is firmly in the grip of the technological way of being in that its ambition is to gain control of all factors rather than working with the complex layers of lives and earth on which it depends.[535]

According to Berry, such aspiration to total control creates more risk than it solves: the control which can grow tomatoes in January is much more precarious and problematic than the biological flexibility which gets the wild oak and mouse through the winter, though such wildness, to the technological mind, appears "uncontrolled." Such agriculture and the centralized food systems that go with it cannot have a "small" disaster—only the diversity of smaller scale agriculture sustains the margins which provide essential buffers against such perturbations. Because of the way it degrades the land, mechanized monoculture agriculture is only productive in terms of man-years, not per unit of land. From a biological and geological perspective it appears that the problem of soil degradation created by such agriculture is increasingly impervious to simple technical fixes.[536]

Any solution to the problems created by the principle of homogeneity begins with the realization that food is a cultural product, Berry says. "The agriculturists who think of the problems of food production in terms of technical innovation are oversimplifying both the practicalities of production and the network of meanings and values necessary to define, nurture, and preserve the practical motivations."[537] Furthermore, such a widened

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[534] Berry, The Unsettling of America, 169, chapter 5.

[535] Berry, What Are People For?, 166; Berry, The Unsettling of America, 70.

[536] Berry, Freedom and Community, 13; Berry, The Unsettling of America, 71, 223, 166.

[537] Berry, The Unsettling of America, 43.

scope of interest would have to deal with the political reality that the industrialization of food production is intimately connected with the political project of increasing biopower. Food surplus is a political tool, yet as a political tool it is a double-edged sword because industrialized food production demands petrol and producing petrol requires food with the result that food and fuel become equally politicized. The use of food for political purposes in the international food trade creates need for the continuous deployment of military force, because if we are inextricably dependent on foreign supplies we are hopelessly dependent on military force when that commerce is interrupted.[538]

## Breeding Poultry for Disease Resistance

Does such a general outline of Christian agriculture have any explanatory value? Part I, using Heidegger's thought, developed a range of regions of questioning which was essential to laying bare the drive toward technological development. I applied those regions of questions at the end of Part I to the development of a machine to test human ova. Suppose then, in looking at a similar question in agriculture, we ask not about whether we should develop machines which indirectly modify humans, but if we might be allowed to modify animals to fit machines. This question can easily be couched in terms of a question familiar in modern industrialized chicken farming: Should we breed poultry for increased disease resistance?

This question is usually the cue for philosophers and theologians to begin to talk about metaphysical distinctions and the "form" of eternal chickenness, which is not to be violated, but I have argued that this route is of severely limited value. Part I indicated that proper deliberation about such a question requires unpacking who is deliberating about the question and *why* they deliberate, in what context they do so, and what the theory and practice are within which the asking is being generated.

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[538] Berry, Freedom and Community, 79, 80, 88; Berry, The Unsettling of America, 36-37.

The people currently most concerned with this question are the decision makers in the egg and chicken meat industries. The authors of the revealingly named Chicken Meat and Egg Production[539] describe the U.S. egg production industry thus:

During the last one hundred years, the number of US farms producing eggs dropped from 5 million in 1900 to under 1000 in 1999. In 1978, Watt Publishing Co. began a survey of major egg producing companies in the United States. They reported that 34 companies owned 1 million or more laying hens, representing 27% of the nation's laying hens. The most recent survey (2000) listed 63 companies with 1 million or more hens, representing 78% of the nation's total flock. In addition, 5 companies with 10+ million hens each controlled 27% of the nation's flock and 11 companies with 5+ million hens controlled 41% of the nation's flock. This leaves about 59 million of the nation's 275 million hens in the hands of owners of less than 1 million hens each.[540]

This rapidly-commercializing egg industry is paralleled by the even more rapidly growing US chicken meat industry established after World War II. This industry has become "vertically integrated," with the top five firms producing half of the country's meat, and with the largest producing 25% of US output. "[T]his industry has been one of the fastest growing of all agribusiness industries in the United States."[541]

Such increases in the size of "farms" and their profitability has been built on the application of the scientific methods of segregation, testing, maximizing growth to feed ratios and minimizing cost to production ratios. Maximization of the number of chickens in relation to space has been an important part of this scientization, meaning that for

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[539] "The information and research needs of this dynamic industry grow at an ever increasing rate as individual companies strive to improve performance and efficiencies and to reduce costs. Issues associated with the environment, animal welfare, food safety, business management, and labor have become critical areas for problem-solving efforts. This edition of Commercial Chicken Meat and Egg Production has changed from emphasizing the chicken to emphasizing the business of raising chickens." Donald D. Bell and William D. Weaver, Jr., eds., Commercial Chicken Meat and Egg Production, 5th ed. (Norwell, Mass.: Kluwer Academic Publishers, 2002), xi.

[540] Donald D. Bell, "Introduction to the U. S. Table Egg Industry," in Commercial Chicken, 949.

[541] Paul W. Aho, "Introduction to the U. S. Chicken Meat Industry," in Commercial Chicken, 806.

laying hens, "the use of cages for commercial egg production has become increasingly popular to the point that today, it is estimated that over 75% of the world's commercial table-egg-producing flock are kept in cages (Bell, 1995). In the United States, over 95% of the layers are in cages (Bell 1993),"[542] making caging a central part of individual companies' attempts to "improve performance and efficiencies and to reduce costs."[543] Such high caging rates mean costs are also directly related to control of disease, because many poultry diseases are untreatable and treating with medicines can be costly.[544]

Two main problems of these systems press the question of disease resistance. The first is that as farm size increases, even if there is no decline in per-animal space or rations, a decline in performance results which is "almost certainly due to the increased incidence of disease."[545] At the same time, broilers and egg laying chickens have been homogenized and pushed to the edge of their genetic envelope in the interests of either maximal meat or egg production, meaning they are much more sensitive to their environment than "wild" or genetically diverse populations.[546] The same issue is raised for laying hens because one of the main cost ratios of egg production is inversely related to animal or cage density.[547]

Because improvements in breeding and nutrition have been the central factors in raising yields, it is natural that breeders focus on reducing disease.[548] "The improvement in the genetic potential of chickens over the last 50 years has been the cornerstone of

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[542] Donald D. Bell, "Cage Management for Layers," in Commercial Chicken, 1007.

[543] Bell and Weaver, Commercial Chicken, xi.

[544] Carol J. Cardona and Gregg J. Cutler, "Medication for the Prevention and Treatment of Diseases," in Commercial Chicken.

[545] David Sainsbury, Poultry Health and Management: Chickens, Ducks, Turkeys, Geese, Quail, 4th ed. (Oxford: Blackwell Science, 2000), 9.

[546] Michael P. Lacy, "Broiler Management," in Commercial Chicken, 829.

[547] H. A. Elson, "The Economics of Modified Enriched Cages (MEC) Compared to Other Systems of Egg Production," in C. M. Sherwin, Modified Cages for Laying Hens: Proceedings of a Symposium Held at Nobel House, London on 18th January, 1993 (Potter's Bar: Universities Federation for Animal Welfare, 1994), 94.

[548] Lacy, "Broiler Management," 829.

industry progress." Today producers can expect to get twice the weight in half the time with feed conversion twice as good as compared with traditional breeds.[549] These increases in productivity have led to further systematic attempts to lower human labor costs and production costs. On these large egg farms, for instance, 25-30 people care for a complex of one million hens.[550] The result is that, "lower costs have not only fueled higher consumption, but have also given the chicken industry the inexpensive raw material necessary to produce a variety of further processed and value added products."[551] The final result of cost reductions is an increase of the power of the major producers over their own production and a gain in freedom within the marketplace, power which is based on cost control.

Costs of production are influenced by stocking density (area per bird), housing system, food intake, labour requirements, hygiene, mortality and bird performance. It is well established that they are lowest in conventional cages at high stocking densities and highest in the free range system. They are more variable in alternative systems than in cages.[552]

Homing in on lowering these costs, the major commercial breeding companies (about twenty companies worldwide) aim to develop strains with lower mortality and higher producing potential.[553] "The aim of breeders of commercial poultry stocks is to permanently change the phenotypic characteristics of the birds that improve their productive performance. Growth rate, egg production and egg quality, feed conversion efficiency, carcass conformation and disease resistance are examples of characteristics that poultry breeders aim to improve in their stocks."[554] Genetic transfer techniques and

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[549] Aho, "Chicken Meat Industry," 804.

[550] Donald D. Bell, "A Model One Million Hen In-Line Egg Production Complex," in Commercial Chicken, 977.

[551] Elson, "Modified Enriched Cages," 91.

[552] Aho, "Chicken Meat Industry," 804.

[553] S. P. Rose, Principles of Poultry Science (Wallingford, Oxon: CAB International, 1997), 91.

[554] Rose, Poultry Science, 91.

artificial insemination programs are often used to expand the limits of the gene pool and more effectively control reproduction.[555]

It is clear from the language used and the context of the question about breeding chickens for disease resistance that questions about the permissibility of breeding for disease resistance are part and parcel of breeding programs designed to maximize "product." Breeding within an industrial system aims at fitting the animal to the environment, and if environment includes higher risk of disease (which intensification entails) then breeding for resistance is implied in the commitment to increase yields within the project of breeding for maximum efficiency of byproduct production (meat or eggs). Disease happens to be an important uncontrolled variable within such production systems.

Animal welfare in such systems is taken into account mainly on the presupposition that a minimum concern with animal welfare promotes efficiency. Within the context of this industrial agriculture, it is accepted that there are basic freedoms which should be accorded to all farm animals, such as freedom from hunger and thirst, freedom to express normal behavior, etc.[556] But as Part I has indicated, if the animals are considered raw material then their welfare will be respected only in relation to public opinion and production costs, not in relation to the animals themselves.

How might Christian belief about the goodness of creation bear on the question of breeding for disease resistance? As indicated above, the question cannot be reduced to asking "What *is* a chicken?" but must be "What is the permission embodied in the relationship of human and chicken?" What *exactly* a chicken *is* will always retain its ambiguities (as will the defining of humans). Barth has argued that the chicken is a fellow creature, sharing with humans at the table spread for all creation. This suggests that we do not really ask about chickens at all if we view them as raw material, but only begin to ask about them out of a recognition of their otherness and a sympathetic attempt to grapple with and respect it. Barth has indicated that permission has been granted for humans to eat flesh, but it has not been given to renounce fellowship with the animals by

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[555] Rose, Poultry Science, 96.

[556] Rose, Poultry Science, 126ff.

instrumentalizing the living animal. We might even strengthen Barth's formulation by saying that in living with animals, and in attentive partnership with animals (most clearly seen in the long term partnership of domestication), we might have something to learn about God's grace.[557] Thus the Christian question is "How can we take the chicken seriously, valuing both the individual's flourishing and the givenness of the species with all its essential and wonderful material and social variability?" Clearly, the animals with whom humans have lived most intensively, the domesticated animals, most directly (but by no means alone) bear the brunt of our decisions to forego such sympathy.

In this case the practical implication of the doctrine of creation is to critique the project of fitting the animal into an intensive environment, and call for an increasing attentiveness to the welfare of animals. Use of the term 'sympathy' is not meant to emphasize our psychological rapport with animals and theirs with us,[558] not least because this is rather thin (but not absent) in the case of chickens. I am indicating that the otherness of poultry is complex, social, material, and in the absence of human breeding efforts, self-sustaining, and as gifts of creation their very givenness at these levels ought to claim our attention as we include them as partners in the project of human sustenance. This observation urges the thoughtful oversight of farm animals with an eye to the sustainability of their health and the land which they (and we) depend on. Such attentive husbandry relies on the ordered materiality and action of the chicken itself as the set of cues through which its flourishing is discerned. In relation to chickens this impulse is expressed by attempts to devise cages in which hens can express natural behaviors through the provision of perches, nesting boxes, dust baths, etc. Such attempts to promote

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[557] Webb, On God and Dogs, chapter five. Webb criticises Barth for so focusing on divine benevolence and human reception that he leaves no room for the gift relationship between humans and animals. There is certainly more to be said than Barth does about what humans might receive from and give to animals. However, Webb, in interpreting Barth exclusively from CD III.4, reveals an incomplete acquaintance with Barth's understanding of creation in claiming that Barth thereby warrants a relationship of human use of animals.

[558] This is in distinction from many salutary animal liberation arguments which rightly try to circumvent use of the concept of animal rights. See Webb, On God and Dogs, chapters three and five.

chicken welfare are a small step beyond simple modification of barren battery cages.[559] Yet without a major restructuring of the market even these minor changes in care are only marginally economically feasible, unless premium prices are generally embraced.[560]

Any more radical search for a way of life which receives creation as a gift will call forth wider systemic changes in the way we eat, think about, and practice food buying. In the process of deliberating about whether to breed chickens for disease resistance we again stumble across the "monstrous range" of the Sabbath claim, glimpsing beyond ameliorative action more radical possibilities for response. Breeding for disease resistance has been and will always play some role, however minor, in the discipline of attentive husbandry: but we have been enabled to see that what is at stake in asking the question within the context of widespread industrial farming framework is no more or less than the validation or incremental repudiation of the presuppositions of technological agriculture; the technological way of being.

## Eating and the Earth

Our discussion of poultry breeding has clarified the point with which we began, well restated by Stephen Webb. "Eating and animals are thus more than symbols; food becomes part of the daily struggle of obeying God."[561] The rise of industrial agriculture, Berry continues, implies not only an impoverished view of the work of agriculture, but also of eating. By making a social ideal of minimal effort spent in preparing and growing food, and a goal of minimum cost, a wide range of effects has resulted, most importantly in turning eating and growing over to industry or "the expert." The acceptance of this separation is the final self-estrangement of the gardener planted by God in the garden: the

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[559] B. O. Hughes, "Origins and Development of Modified Cages for Laying Hens," in Sherwin, Modified Cages, 1.

[560] Elson, "Modified Enriched Cages," 93-94.

[561] Webb, On God and Dogs, 22. Webb ties this comment to the test of wills played out in the arena of eating which culminates in Daniel 1:15.

consumer repudiates any link to production, and the farmer forgets she is the consumer's representative on the land. As a result both eat worse and farm worse.[562]

What we must ask is, Can we envision the richness of restraint? Can we delve into the richness of creation if that means forbearing to do something we *can* do? To argue for a new balance between people and tools, biological and machine energy, is to argue for restraint in the use of machines and a ban on the blanket application of technological logic to all spheres of life. All machine metaphors point to infinite growth, but we have no evidence that these lie within our sphere of responsibility, says Berry.[563]

The envisioning of restraint might begin with the experience of health, Berry notes, and such an experience might easily begin with the enrichment of our eating. Enrichment, however, we must remind Berry, when understood Christianly, entails a renunciatory moment. We cannot eat well if we do not understand the relativization of desire and need embodied in fasting, and the contextualization of the Christian freedom of diet implied in the eschatological witness of vegetarianism. Contra Barth, who insinuates that vegetarianism rings of Pelagian perfectionism,[564] I want to stress that we cannot properly talk about the tragic fallen aspect of meat eating (of which Barth is well aware) without taking seriously the eschatological witness of vegetarianism, which may be more attractive than ever in an age of factory farming. But contra Webb and others,[565] vegetarianism cannot be established as a universal Christian mandate without undermining Christian freedom and the divine Noahaic concession.[566]

In practice, eating in gratitude is connected with an awareness of food production, not only its mechanical producers, but its life cycle which passes through our own bodies.

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[562] Berry, What Are People For?, 128; Berry, The Unsettling of America, 37-38.

[563] Berry, The Unsettling of America, 94.

[564] Barth, CD III.4, 356-357.

[565] Webb, On God and Dogs, chapter seven.

[566] Genesis 9:3.

Berry contends that such an awareness is easily cultivated, for instance, through attempts to grow a small portion of one's own food.[567]

We lose our health—and create profitable diseases and dependencies—by failing to see the direct connections between living and eating, eating and working, working and loving. In gardening, for instance, one works with the body to feed the body. The work, if it is knowledgeable, makes for excellent food. And it makes one hungry. The work thus makes eating both nourishing and joyful, not consumptive, and keeps the eater from getting fat and weak. This is health, wholeness, a source of delight. And such a solution, unlike the typical industrial solution, does not cause new problems.[568]

Here we begin to see the force of Berry's claim that bad work and bad eating reciprocally feed one another to the detriment of the health of many systems.

An awareness of the links between eating and producing leads naturally, Berry says, into the quest for responsible consumption. Indeed, the "responsible consumer" escapes the consumer category altogether because consumers are by definition estranged from production. The practice of responsibility in buying is categorically different from organized consumption because it marks a participation in production, bringing together what the consumption mentality separates. Responsible consuming cannot be a stand alone project, but is incidental to a responsible life.[569]

Good political authority, recognizing these trends, would encourage the greatest possible technological and genetic diversity against the present promotion of dangerous uniformity, Berry contends. It would care for farmers, land and community by promoting farming at a smaller and more stable scale. In doing so it would promote local self-sufficiency in food production because the cheapest and freshest food is produced closest

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[567] Berry, Freedom and Community, 41. For a list of practical suggestions on how an urbanite might begin to develop gratitude and understanding for the life cycle of food, cf. Berry, What Are People For?, 149-150.

[568] Berry, The Unsettling of America, 138.

[569] Berry, The Unsettling of America, 25.

to home. Good consuming would support such governance by seeking to keep its money near home in the local economy.[570]

It is perhaps an encouraging indication of the inner coherence of this chapter's argument with that of chapter four that here too the remedying of the fragmentation of the modern age entails learning a new logic in one's personal experience. Berry indicates this by claiming that his aim in discussing agriculture is to indicate how we may increase our capacities as individuals by learning to inhabit a redefined sense of what it means to be effective. Again, such a call for a renewal of personal practices must also be viable as a true political alternative. Here communities which are renewed in their understanding and love of creation can be generative of political solutions, and for this reason communities who have explored the inner connections of Christianity and husbandry on the margins of industrialized agriculture (such as the Amish) remain instructive.[571]

### *Clashing Forms of Life? The Sexual Complex*

By now the framework within which I will explore the moral import of the gift of human sexual difference will be becoming familiar. Thus only a sketch of those possibilities will be indicated here, understanding that contemporary sexual practice and thought about sexuality faces the same social forces as industrialized agriculture. But having unpacked those forces as they bear on a decision about developing a new ovum testing machine, what can our theological discussion add to the analysis of Part I?

Paralleling the problems of the nomenclature of environmentalism, the contemporary usage of the word "sex" betrays a division of knowledge which separates being from action, and this act from its social and created matrices.[572] This disassociation assumes that we know things better by isolating them, again presaging the familiar

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[570] Berry, The Unsettling of America, 220-221; Berry, Freedom and Community, 40.

[571] Berry, The Unsettling of America, 23-24, 210ff, 218.

[572] Bernd Wannenwetsch, Text of Sexual Ethics Lectures (Oxford University, Winter Term 2000), Lecture one.

application of industrial method. Thus human fertility is conceived as thriving when "freed" (like food production) from the cultural ties which once linked it to thinking about responsibility and sustainability. Richer and more diverse (because more particular) farming and sexual practices are simply replaced without the cultural forms, disciplines, and restraints and ecological insights that once kept them sustainable.[573]

Having understood sex as a resource for the production of pleasure, Berry argues, marriage is put under an unfulfillable demand. Rather than enjoying the many-layered richness of marriage, such as in its dimension as a communion of workmates who procreate and have pleasure in it, it becomes instead susceptible to succumbing to the grim competition of sexual capitalism. Having discarded any interest in exploring the joy of marriage as working together in harmony, but having promised to "forsake all others", marital partners are left to explore with one another only the unifaceted aspect allowed by conceiving each other as one another's exclusive sexual property. But, Berry argues, it is possible to imagine marriage as more open than this, more communal and inviting.[574] As O'Donovan earlier indicated, the framework of Christian marriage centers and orients human sexuality by giving it a cultural form which reveals the meaning of biological dimorphism. In doing so, it makes possible the vast range of human sexual difference which gives marriage its great richness. As an account of vegetarianism was a necessary part of talking about good meat eating, so also is it necessary to give close attention to the eschatological witness of celibacy in a full account of the reproductive aspect of Christian marriage.[575] Yet our concern here is a narrower one of outlining what might be entailed in the married witnessing through marriage to the goodness of creation.

Berry points out that the concept of marriage both protects human society and fulfills individuals in their particularity. The disorderly discharge of sexual energy is destructive and fidelity is the necessary discipline of sexual energy. In marriage, a man and woman are not united *against* a community (forsaking all others) but are united *with* the community in a vow of sexual responsibility toward all others. Thus a generalized

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[573] Berry, The Unsettling of America, 132-135.

[574] Berry, The Unsettling of America, 118-120.

[575] Banner, Christian Ethics, 301-307.

created impulse is made meaningful and responsible by being tied to the acceptance with joy of one's own particularity and the particularity of another. Only in this particular way of faithfulness does one take seriously the sexual aspect of communal life.[576]

In contemporary society the social aspect of sexual fidelity is marginalized by a view of sexual energy as a force to be extracted or "utilized." But, says Berry, "Sexual energy cannot be made publicly available for commercial use…without destroying all of its communal or cultural forms: forms of courtship, marriage, family life, household economy, and so on. The devaluation of sexuality, like the devaluation of a monetary currency, destroys its correspondence to other values."[577] It destroys by, for instance, moving the attention of potential lovers from the eyes and speech of the other to the sexual anatomy. It is a fearful thing to reduce the complexity of fidelity and love to sex, Berry continues. In love we find ourselves by losing ourselves; in sex we seek salvation through acquisition and use. In forsaking the upholding of sexuality based on fidelity for sex as a social tool, a society severs itself from trust within sexual life, and in so doing politicizes sexual energy. Once politicized, one no longer asks how created goods may be properly expressed but how instincts may be indulged with the least risk to personal safety. Whether through disorderly use or systematic exploitation sex is dangerous because it is powerful, whereas as part of the invitation to give one's self away in marriage it plays a part in the ongoing transformation of one's own priorities.[578]

According to Berry, like our estranged eating practices, the death of vibrant sexual life occurs in the failure to imagine its place within its wider range of implications and the refusal to commit and explore the particular.[579] As we saw in the example of gardening, work and eating, marriage and fertility exist in a single rich matrix within which sexual energy (and indeed pleasure) has its appropriate and therefore richly embodied place.

These insights can be schematized in the terms of this chapter's earlier discussion. The proper, formed love of createdness in the context of marriage entails an appreciation

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[576] Berry, The Unsettling of America, 122-123.

[577] Berry, Freedom and Community, 134.

[578] Berry, Freedom and Community, 134-139, 142-144.

[579] Berry, Freedom and Community, 166.

of sexuality as part of the fabric of social and family life, to be tended and cared for in attentiveness to this important role. Berry has indicated a complex of Manichean trends in contemporary sexual practice—where creation is seen not as good but as neutral, to be used or exploited, controlled or overcome. Because Christians are prepared to consider the sexual rhythm as part of the gift of fertility, they might also see the relevance of these observations on the social construction of the use of the contraceptive pill, which is touted as bringing freedom by overcoming rather than working with human fertility cycles. This is not to set up an absolute prohibition of its use (as if this was the task of moral theology). It is, however, to suggest that the weight of evidence indicates that modern practices of contraception fit within a constellation of thought and practice which render problematic the embrace of bodiliness and the situation of sexuality firmly within a context which respects the embodied features which make for a rich, diverse marital union.

Stated more positively, an appreciation of creation sees in the female fertility cycle not a messy inconvenience to be escaped or minimized by chemical means but one facet of the gift of human fertility from which we may learn the shape of God's grace as Creator. Because Christians have reason to closely question the quest for complete chemical and mechanical control of fertility, they will also be enabled to sense estrangement from the idea of "multiply and fill the earth" as a formula of blessing. Because they recognize fertility as a blessing they are prepared to consider that much is to be learned about sexual intimacy by recovering the shared disciplines of attentiveness to the limits and rhythms within which the union of man and wife can become more nuanced, more particular, and more embodied.[580]

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[580] Feminist Germaine Greer agrees that the technological paradigm applied to female sexuality has, like its application to agriculture, fundamentally undermined the *femaleness* of human fertility. More interestingly, she laments the inability of thirty years of feminist theory to come up with an effective way to convey the positive significance of fertility and menstruation. Our discussion suggests that attempts to portray fertility and menstruation in abstraction from their place in the marital embrace will fail to reverse the pervasive feeling that menstruation is the "liquification of abjection" and therefore to be treated with pills, surgery and "protection." Germaine Greer, The Whole Woman (London: Transworld Publishers, 1999), chapters "Manmade Mothers" and "Womb".

Our case study of IVF at the conclusion of Part I drew out its emplacement within a social constellation resembling the Pelagian error in which the barriers of evil material can be overcome to achieve human perfection. A certain Promethean hubris was indicated which is mixed up with medical desires for career advancement, technical excitement and political power. Christian thought, negatively, is prepared to closely consider and reject any such use of others' sexuality as a means to another end, such as personal social prestige. Such a questioning of the status quo is made possible because Christians understand children as a gift, which also prepares them to consider the indeterminacy of childbirth as part of that gift. The Christian practice of celibacy has always indicated the eschatological truth that children are not essential to human fulfillment. Similarly, because Christians find their identity in Christ, they are freed from placing their children in the position of having to validate the parental desires which led to the undertaking of technical struggles before and during pregnancy to bear a "normal" child.[581]

A repudiation of the idea of humanity as standing reserve based on respect for the human body as God's gift also implies staunch opposition to any technique which depends on the exclusion of human offspring from the human community for the purposes of any supposed "greater future good". The presence of the other, however nascent, is a place marker of the limit of human naming power established in God's claiming of that role.[582] Thus Christians cannot but agree with the prophetic note Nietzsche strikes: "Mankind unsparingly uses every individual as material…is that the *umana comedia*?"[583] Such tragicomic suggestions have throughout the Christian tradition been countered by an inclusion of and care for the disabled by the Christian community of worship. To do so is to be reminded of the goodness of all creation, even when broken, and reveals the cruelty of "perfectionism" and the degrading implications and the non-

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[581] Robert Song, Human Genetics: Fabricating the Future (London: Darton, Longman and Todd, 2002), 124.

[582] Isaiah 43:1.

[583] Human comedy. Friedrich Nietzsche, Human, All Too Human, trans. Marion Faber and Stephen Lehmann, intro. Marion Faber (London: Penguin Books, 1984), 9:585.

necessity of having "perfect" children.[584] Only as humanity ceases to try to name and remake itself in the project of giving itself dignity will its ingenious medical efforts thrive.

Positively, Christians are nurturers because they appreciate the givenness of creation and their own adoption into God's family. Adoption cannot then be a "last stop" when techniques have failed, but can only be understood as a positive lived reflection of the experience of being adopted as God's children.[585] The orphan claims the attention of Christian marriage precisely because like a genetic child the orphan is already embodied and present. The practice of adoption, rather than participating in the modern medicalized fertility project, may be instead an attempt to reinforce the unity of the marital union by disclosing the breadth and depth of parental and familial forms of love.[586] Christians will have a concomitant skepticism about the defensibility of the application of vast sums of power and energy to the human body which characterizes the "fertility" industry, an industry which closely conforms to the technological project of gaining control of biological processes at any cost.

***Conclusion: Sociality and Materiality as a Site of Conflict***

With these two examples we conclude the discussion of concrete and practical moral questions which characterized this chapter and chapter four. This chapter responded to Grant and Heidegger, who drew our attention to the objectification of human and material givenness which results from the technological rejection of the importance of the formed nature of materiality. But what they have not provided is a *reason* why we should not, as Foucault says, simply embrace our remaking. This chapter, and the last, argued that Christians, who are told that all humans are children of the Creator, *do* have a reason to respect but not worship creation. As the thinkers of Part I

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[584] Song, Human Genetics, 125.

[585] Song, Human Genetics, 125.

[586] Waters, Reproductive Technology, 75.

have indicated, our technological social context shapes us in subtle, complex and often ungraspable ways. In our reproductive lives, as in our eating and our political existence, we are given a chance to resist the powers of dissolution which set upon humanity to devour it. Given this insight, we can see that to ask whether or not we should use a given technology is a facile question unless tied to questions about the form of our being: What kind of being are we expressing and becoming through our activity at this locus?

This chapter has suggested ways in which the Christian affirmation of God as Creator can be understood to claim human working, eating and sexual life. In doing so it has developed a Christian commentary on the search of Part I for the givenness of materiality to guide human making. Within the context of Part II, it, with chapter four, represents an attempt to indicate some of the concrete ways faith in the Trinitarian God might challenge or encourage trends within contemporary technological society. A final chapter will draw out some of the inner contours linking chapters four and five.

# Chapter Six: Augustine and Barth on Technology for Good and Evil

What manner of time, that is the heart of the matter.

Thomas Mann[587]

This study began with an examination of Heidegger's understanding of technology, ontology and human action, and so ends by returning to examine the intertwining of these themes. An examination of the inextricable relationship of these fundamental questions to the Christian gospel will be the task of this chapter, which aims to develop a more generalized account of the conflict between the two ways of life sketched in chapters four and five.

Augustine's understanding of the two cities, and Barth's doctrine of the redeeming work of the Trinity from Church Dogmatics volume IV anchor this chapter's discussion, which has a dual purpose. On one hand it develops a theological narrative of the genesis of the conflict between the technological and Christian forms of life. On the other, this narration functions as a deep account of the moral back cloth of all human action in a technological age, of which any contemporary deliberation about new technology must be constantly aware. The chapter's two aims are introduced by contrasting the modes of moral deliberation which characterize the two ways of being. The chapter's dual purpose is necessitated by the understanding of the task of moral theology as defined by Barth and Bonhoeffer: Christian moral theology is most properly the attempt to offer a description of moral space and obedient human action which prepares Christians for humble attentiveness and free action within the ongoing leading of God's own work. John Webster has perhaps best encapsulated this understanding of of moral theology in his description of Barth's Church Dogmatics:

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[587] Thomas Mann, Doctor Faustus, trans. H. T. Lowe-Porter (London: David Campbell Publishers, 1992), chapter 25, 234.

Barth's *Dogmatics* is, amongst other things, a moral ontology—an extensive account of the situation in which human agents act. Barth's ethics has, therefore, a very particular character, both materially and formally. It is primarily devoted to the task of describing the 'space' which agents occupy, and gives only low priority to the description of their character and to the analysis of quandary situations in which they find themselves…such an ontology is not centred on the human agent, and especially not on moral reflectivity. Yet Barth pushes *this* kind of focus on moral selfhood out of the way in order to introduce in its place what is to him a more theologically—and humanly—satisfying account of the moral life as genuine action in analogy to prior divine action.[588]

A theological description of moral space which hopes to provide a re-narration of contemporary technological practice must establish that technological practice which is a force for evil stems from a spiritual malaise and, insofar as technology is good, it is a participation in God's ongoing salvation of the world from its pride. The chapter's main argument begins on the negative side, tracing Augustine's concern "with the basic flaws that must be discerned in each and every form of political society."[589] Augustine develops a critique of human action which reveals the social aspect of human sin by arguing that pride is the hoarding of what is properly communal for one's own good. I apply this thought to name the demonic form of technology as the pride of our age. Meilaender and O'Donovan substantiate Augustine's claims by arguing that modern society is wrapped in the chains of pride as expressed in the habits of contemporary technological practice. The chapter's main argument concludes on the positive side, as Barth argues that the ontological bedrock of reality is established in God's work on the cross to overcome death and pride. This implies that God's present working in the world is the continual expression of this cruciform overcoming of evil, to which redeemed human action must conform. Thus human action and human work are good when participating in the historical outworking of this redemption.

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[588] John Webster, Barth's Ethics of Reconciliation (Cambridge: Cambridge University Press, 1995), 1-2.

[589] John M. Rist, Augustine: Ancient Thought Baptized (Cambridge: Cambridge University Press, 1994), 217.

This chapter argues that the technological form of life must be theologically named in order to facilitate our ability to perceive specific contemporary technologies as manifestations of human sin, pride, and *curiositas*, and thus self-delusion. Conversely, while "good" technology cannot be described on the basis of a principle, it is important to describe the shape of redeemed human action (and thus the making of technological artifacts) which is guided by a formed vigilance in reverence for God's ongoing work. This project assumes that technology is not a thing, but a mode of action, a type of event. In faith Christians believe that in the best case, human participation in technological activity can be understood as the contemporary work of humans who hand over their divinely given skills as humble gifts offered in train to the contemporary, historical working of the Redeemer.

***How Far is Too Far? The Question of New Technology as a Diagnosis of Our Mode of Moral Deliberation***

We return to Bonhoeffer's definition of moral theology, which began chapter four, to unpack the concrete implications of his claim that Christian moral deliberation focuses on embodying the good rather than the untransgressable limit. "God's commandment, revealed in Jesus Christ, embraces the whole of life," says Bonhoeffer. "It does not only, like the ethical, keep watch on the untransgressible frontier of life, but it is at the same time the centre and the fullness of life."[590] Despite God being the center of the moral life, our common sense and all too often moral theology return nonetheless to the prototypical moral question of the juvenile: "How far can I go?" This question hides a fatal narrowing of moral vision. Rather than harnessing thought to overcoming barriers to the embodiment of the good, it is oriented to the attractions of the privation of the good, tending to link moral inquiry with the pursuit of an indeterminate and decontextualized freedom and the avoidance of moral consequences. Thus the heart of right moral action, delight in the good pleasure of God, is eclipsed by the desire for self-determination and

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[590] Bonhoeffer, Ethics, 247.

self-protection. This chapter will contend that the question "How far can we go?" betrays a fatal shift of moral perspective; God's delight has become a peripheral concern, displaced by preoccupation with power or fear or profit, in Augustine's terms, by pride.

The previous two chapters explored several practical issues, in order to ask how human action marked by a sincere desire to echo God's action might take its cues from mediating forms. By developing an understanding of how such forms might mark Christian action it becomes possible to see that the "How far can we go?" question assumes the very boundaries it wishes to relativise, hence Foucault's internal consistency in not asking it.[591]

Christian thinking, Bonhoeffer says, because it knows the center of the good, can distinguish between the 'permitted' and 'permission'. "The 'ethical' defines only the boundary, the formal and the negative, and is therefore possible as a theme only on the periphery, formally and negatively. The commandment of God, on the other hand, is concerned with the positive contents and with man's freedom to accept these positive contents."[592] Moral deliberation within such presuppositions takes on an entirely different cast. For example, continues Bonhoeffer, if I love my wife as part of the acceptance that marriage is an institution of God, then,

> There comes an inner freedom and certainty of life and action in marriage; I no longer watch with suspicion every step that I take…the divine prohibition of adultery is then no longer the centre around which all my thought and action in marriage revolves (as though the meaning and purpose consisted of nothing except the avoidance of adultery!)…the divine commandment has here become the permission to live in marriage in freedom and certainty.[593]

> The church can only appear hypocritical if it does not frankly admit that it has often and miserably failed to think about its action in such positive terms. As a result it

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[591] This insight parallels McIntyre's claim about the fading moral momentum of western society in After Virtue, and is sympathetic with Oliver O'Donovan's attempt to show how contemporary political liberalism is a post Christian phenomenon. See O'Donovan, Desire of the Nations, chapter seven.

[592] Bonhoeffer, Ethics, 251.

[593] Bonhoeffer, Ethics, 248.

has consistently failed to challenge the story of "technological progress", not because it does not have the resources to do so, but because it has lapsed into 'ethics' rather than seeking to be transformed. How can we take seriously this consistent failure of the church while asserting its real redemptive possibility? The focus of this chapter is to explore the basic mistakes of such a failure so that the church may confront the story of progress without simply capitulating or proffering a facile Luddite refusal. Augustine, and later Barth, wrestle with precisely these questions by admitting the weakness and insufficiency of the church, even while claiming that it is God's chosen mode of being in the world. Indeed, they argue that the church's lifeblood is precisely its realization of its weakness. Its life is found in the question of the rich young ruler whom Jesus loves (Mk 10), "What can I do to inherit eternal life?", the open question marking the humble desire to "learn and test and discover and know what is the will of God, the commanded action that is good and acceptable and perfect to Him (Rom. 12:2; cf., Phil. 1:10; Eph. 5: 10, 17)."[594] Augustine contends that human evil flows out of the refusal of such humility.

## *Augustine's Two Cities*

### Love and Ethics

"[I]n Augustine love of God must be tied (socially) to love of neighbour, [and] hatred of God must be tied to hatred of neighbour and the desire to dominate."[595] This great Christian polarity grounds Augustine's City of God, which analyzes the history of the Roman empire through its lens. Augustine understood pride and humility to be the basic states of human action, with humility consisting in the recognition that humanity depends on God for its existence, and that in its fallen state humans can only find wholeness with the active help of God's own humility and servanthood, Christ.

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[594] Barth, The Christian Life, 31.

[595] Rist, Augustine, 189.

This Augustinian emphasis on humility transforms the concept of love which was the heart of ancient ethical theory. Augustine combined the Platonic insight that it is not possible for humans to love the unlovely with the Christian teaching that the ability to love is the gift of a loving God, concluding that love cannot be understood if the gulf between the beauties of this earth and the beauty of God, the *basis* of all beauty is not grasped.[596] Because there is this gulf, Augustine says, the beautiful is not to be loved for its own sake but only as an ordered and beautiful divine gift. Thus, a just and holy life is judged by its love of the proper order of created things, a love oriented by its knowledge that God's love for His creation warrants our also loving its order. By framing love of created things in this way Augustine establishes that creation can only be said to be good because its Creator loves it, just as it is intact only because His love holds it together. Thus the basic form of human evil is to love creation for its own sake rather than because it is created, ordered and upheld by God.[597]

As was common to the ethical theory of his day, Augustine understood love (or desire) to be the basic impulse of human action, perfected by the guiding of the reason so that right action might issue. But Augustine differed from his neo-Platonic contemporaries by insisting that the problem of human sin is marked by a deficiency of both knowledge *and* desire.[598] Whereas the Platonist focus on right knowledge led to a high esteem for contemplation, Rist notes that for Augustine "contemplation and action seemed increasingly subordinate to the overriding desire for a Christian life which transcends them both. What matters is less whether one acts or contemplates, but whether one's loves are ordered by God so that genuine virtue, of whatever sort, is possible in the circumstances."[599]

In this way Augustine's thought comes to solidify around a distinction quite foreign to his Platonic roots: that depraved love appropriates what is properly social to the

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[596] Rist, Augustine, 157-159.

[597] Rist, Augustine, 162-165. Cf. also St. Augustine, Confessions, trans. Henry Chadwick (Oxford: Oxford University Press, 1991), 10.29.

[598] Rist, Augustine, 152-153, 156-157.

[599] Rist, Augustine, 201.

private sphere, while holy love is to have a right love toward earthly things, understanding what is properly one's own and what is properly common to all.[600] Augustine's programmatic statement in The Trinity clarifies the complex of ideas which will constitute the focus of this chapter's analysis:

> [T]he soul, loving its own power, slides away from the whole which is common to all into the part which is its own private property. By following God's directions and being perfectly governed by His laws it could enjoy the whole universe of creation; but by the apostasy of pride which is called the beginning of sin it strives to grab something more than the whole and to govern it by its own laws; and because there is nothing more than the whole it is thrust back into anxiety over a part, and so by being greedy for more it gets less. That is why greed is called the root of all evils.[601]

With the crystallization of this understanding of pride as the basic human weakness, the role of pride in forming human institutions became Augustine's constant and central concern. This pair of axes, pride-humility and personal-social, formed the basis of his understanding of the two cities. The earthly city is that society whose unity is the love of power which displaces the love of the properly communal. Augustine stops well short of implying that power over others is itself evil, making himself clear that to love power as an end in itself is the perversion and negation of power. Power too is divinely created and should be loved only insofar as it is applied as a means to a proper end.[602] Remove the love of the good and justice, Augustine famously commented, "and what are kingdoms but gangs of criminals on a large scale?"[603]

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[600] Rist, Augustine, 155.

[601] St. Augustine, The Trinity, intro. and trans. Edmund Hill, ed. John E. Rotelle (Brooklyn, New York: New City Press, 1991), 12.14.

[602] Rist, Augustine, 205, 217-219.

[603] St. Augustine, City of God, IV.4.

In contrast to modern ethical theory, Augustine does not hold the concept of justice to be the key measure against which the action of the two cities is judged, but claims they are set apart by the shape of their collective loves. By calling the two communities of loves cities Augustine intends to draw out a social unity: *societas is* unity of love.[604] The city of God is united in hope because it loves the true good which is God, and hopes in the coming of true peace which is eternal blessedness. But the city of man rejects this eternal good and thus raises earthly goods to the ultimate position, making the goal of its supreme happiness the possession of temporal goods.[605] Augustine warns readers that this worship of earthly goods is a dangerous affair because an association of love is also an association of sacrifice. If social unity is not found in the love of Christ's sacrifice, society becomes vicious, finding its unity in loving sacrifices to one of the gods who is "devoid of true justice" and thus cannot bring peace.[606]

The *locus classicus* description of the two cities is found in the City of God XIV.28. "[T]he two cities were created by two kinds of love: the earthly city was created by self-love reaching the point of contempt for God, the Heavenly City by the love of God carried as far as contempt for self." Augustine explains that by "love of self reaching contempt of God" he means a love that glories in itself while looking to be glorified by men. It indulges its lust for dominion over others, reveling in its own strength and powerful leaders. Its wise men give their lives to the self-aggrandizement of the pursuit of bodily or intellectual goods, the reward of which is an impoverished mastery without true satisfaction. But the inhabitants of the Heavenly City find their highest glory in God and the witness of a clear conscience.

In sketching this portrait of the two cities Augustine is trying to distinguish behind the variety of all human behavior two basic forms of human action. Pride, in attempting to create meaning and garner human glory, exacerbates the discordance of its tumultuous

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[604] Rist, Augustine, 219-220.

[605] St. Augustine, City of God, XIX.4

[606] St. Augustine, City of God, XIX.23

society. Conversely, the Heavenly City expresses in action a love of contentment with limit, of order and discipline both personally and socially. The strength of Augustine's description of the city of man is his firm linkage of the private action of pride and selfishness and the public actions of lust for glory, dominion and sensual pleasure.[607] By grasping this thought we can begin to see that Augustine would have perfectly comprehended the influence of desire and belief on the shape of practices as schematized in Pacey's diagram of technological practice. It becomes apparent why it was necessary, in looking at technological making, to look at each corner of Pacey's pyramid to map out how lustful desires or the love of God's works might shape our technological practice. Uniting these thinkers' insights reveals that what Augustine calls the city of man is in the technological realm a love of power which shapes technological practice by the indulgence of personal desires for power through action in social, political and technological spheres. But in the Heavenly City, Augustine argues, love of God inflames men to seek with their intellect to discern from revelation the proper orderings of life in these spheres, working back to critique and reform the desires.

Augustine refers to these conflicting logics under the Pauline terms spirit and flesh. One city chooses to live by the standard of the flesh, the other by the standard of the spirit, and "each desire their own kind of peace, and when they achieve their aim, that is the kind of peace in which they live."[608] The peace of the flesh is the continual expansion of war and conquest, growing from intolerance of any other rule than self-rule. Augustine saw this prideful peace as grounding the Roman empire, whose apparent stability was actually "achieved through the imposition of one's own will by the exercise of force, and is at once costly in its creation, unjust in its character, and unstable in its existence." Michael Banner continues his summary of Augustine's understanding of the peace of the earthly city by explaining,

> Costly in its creation: of the imperial peace, Augustine exclaims (City of God, xix, 7): 'think of the cost of this achievement! Consider the scale of those wars with all that slaughter of human

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[607] Rist, Augustine, 221; St. Augustine, City of God, IV.3, V.19,20.

[608] St. Augustine, City of God, XIV.1.

beings, all the human blood that was shed!' Unjust in its character: the prime mark of this injustice is, for Augustine, the existence of slavery. And unstable in its existence: In the midst of a melancholy review of the woes of life produced by division and conflict within house, city, world and even within that 'angelic fellowship' posited by 'those philosophers' who insist that 'the gods are our friends', Augustine notes (City of God, xix, 5) that the peace of the earthly city is 'a doubtful good, since we do not know the hearts of those with whom we wish to maintain peace, and even if we could know them today, we should not know what they might be like tomorrow.'[609]

While we moderns easily identify with this description of the antagonisms, trustless associations and tragic conflicts of social life, Augustine points out that God's work is to overturn the lustful human desire for power and selfish love of earthly goods which leads to such suffering.[610] The fruit of this work of grace is the establishment of the true peace of the heavenly city which is harmonious agreement of fellowship, repose of the appetites, and coordination of desire and action, in short, "a perfectly ordered and perfectly harmonious fellowship in the enjoyment of God and a mutual fellowship in God."[611]

Behind the action of both cities is the search for peace, which all men desire. Yet

> [P]ride is a perverted imitation of God. For pride hates a fellowship of equality under God, and seeks to impose its own dominion on fellow men, in place of God's rule. This means that it hates the just peace of God, and loves its own peace of injustice. And yet it cannot help loving peace of some kind or other… It comes to this then; a man who has learnt to prefer right to wrong and the rightly ordered to the perverted, sees that the peace of the unjust, compared with the peace of the just, is not worthy even of the name of peace.[612]

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[609] Michael Banner, "The City, the City and the City: a Lecture for St. Paul's Cathedral," in Scene, Newsletter of the King's College London Theology & Religious Studies Society, 2001, 15-6.

[610] St. Augustine, City of God, XIV.11 See also St. Augustine, Confessions, x.27.

[611] St. Augustine, City of God, XIX.13

[612] St. Augustine, City of God, XIX.12.

Part I suggested ways in which the technological imperative can be viewed as a claim that peace is found in increasing technical control and material prosperity. The Heavenly City knows that precisely such claims mask the power-lust which leads to personal and social degradation.[613] Peace, as Augustine so clearly relates, is found in loving the proper ordering of all things, a nascent form of which we saw displayed in non-Christian protest against the wanton destruction of important created goods.[614] On these grounds we were able to listen attentively to the observations of Heidegger and his interpreters who described the sense that something good was being consumed in the name of lesser goods, stimulating a desire to discern an order which can protect and perceive the order of these goods.

If the philosophers have learned to love aspects of true beauty, can they also perform the good without any knowledge of Christ? While applauding non-believers' recognition of the denuding of the good and affirming that they may act in congruence with the good, Augustine denies that their acts are truly good if not directed to the honor of God. There is no true virtue without true piety, he insists. However, their action is appreciatively received by the city of God because those motivated by glory to be virtuous are of more service to the earthly city than those who are avowedly rapacious. Yet the slope is slippery from this appreciated virtuous action which is based on a love of praise to a lust for power which ceases to care for anyone's opinion.[615] Augustine hopes that those with true piety and who are skilled in the art of government will participate in the wielding of public power. Their ruling is properly circumscribed because they humbly attribute their virtue to the God to whom they have prayed for it, even as they perpetually ask forgiveness for their shortcomings.[616] The implication of Augustine's argument is that the city of God can applaud and participate with those who through technological efforts

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[613] "Societies constituted on acquisitiveness cannot help but be imprisoned within perpetual conflict and violence." Hauerwas, In Good Company, 213-214.

[614] St. Augustine, City of God, XIX.13.

[615] This is why it is so dangerous for technology assessment procedures to encourage corporate moral deliberation about the state of labor and the environment framed only by the limits provided by the necessity of maintaining public relations.

seek to heal the sick, care for the poor, and alleviate injustice, however shadowy their knowledge of the Christ event. Yet Augustine warns that such secular efforts inevitably decay into something less salutary because, if not flowing from the love of God, they cannot but rest on the love of earthly goods or self-glorification.

Having outlined the hidden wellsprings of good and evil loves, Augustine goes on to indicate how these evil loves mature into the deprivation of the good, by embodying the basic falsehood that humans may construct their own welfare using human standards, in short, self-divinization.[617] "By aiming at more is a man diminished, when he elects to be self-sufficient and defects from the one who is really sufficient for him."[618] Out of this basic orientation of the heart, concupiscence, which infects both body and spirit or reason and will, comes all the open evils of action.[619] While not every act of sin is a direct and knowing act of rebellion against God—much sin is the result of ignorance or weakness—all sins are actions whose orientation and standard is self-referential.[620] Augustine thus provides an account which satisfies the demands of Part I: he understands the defects of the self-referential will and misinformed intellect in a way which demands that rigorous moral deliberation question and attempt to reform both the subjective and objective sources of human action. It is this Augustinian insight which justifies Part I's dual focus on subjective and objective technological knowledge which was most evident in the contrast between the work of Grant and Foucault.

The punishment for evil, Augustine continues, is simply the unruliness and ugliness of disobedience itself, which results from the refusal of the promises of God's

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[616] St. Augustine, City of God, V.19.

[617] St. Augustine, City of God, XIV.4.

[618] St. Augustine, City of God, XIV.13. Cf. also St. Augustine, Confessions V.3, where Augustine argues that though science serves as a false god, it may still grasp truth—it is a god precisely because it does have *some* grasp of truth. But only as God and not this god is worshipped can the truth about created things be known.

[619] Allan D. Fitzgerald, John C. Cavadini and Marianne Djuth, eds., Augustine Through the Ages, foreward Jaroslav Pelikan (Grand Rapids, Mich.: Wm. B. Eerdmans Publishing Co., 1999), 226.

[620] Peter Brown, Augustine of Hippo (London: Faber and Faber Ltd., 1967), 350.

grace.[621] The story of the Fall reveals that disobedience abandons God to exist in itself, which is "not immediately to lose all being; but it is to come nearer to nothingness."[622] Yet God cares too much for creation to let its self-destruction be triumphant and so enacts the work of healing which is Christ. Since evil is a deprivation of the good, and not a free-standing entity, "an evil is eradicated not by the removal of some natural substance which had accrued to the original, or by the removal of any part of it, but by the healing and restoration of the original which had been corrupted and debased."[623] The result of God's work of redemption is defined as living out the "somewhat paradoxical [truth] that exaltation abases and humility exalts."[624] What is the content of this healing humility? And how might it engage with our previous thoughts on technology?

## Gift as Moral Hermeneutic

For Augustine obedience in humility is sustained by faith in God's word that He is generous, lavishing gifts on creation. God has "given to mankind certain good things suitable to this life," including peace, health, light, speech, air, in short; "whatever is suitable for the feeding and clothing of the body… and the adornment of the person."[625] These gifts are granted under the equitable condition that they be used to serve the peace of human society and their bounty elicits wonder and praise. In a striking passage, Augustine utters just such praises of God's provision of the human ingenuity which is the possibility of human artifice:

> Who can adequately describe, or even imagine the work of the Almighty?…Man shows remarkable powers of mind and reason in the satisfaction of his aims, even though they may be unnecessary, or even dangerous and harmful; and those powers are evidence of the blessings he

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[621] St. Augustine, City of God, XIV.15.

[622] St. Augustine, City of God, XIV.13.

[623] St. Augustine, City of God, XIV.11.

[624] St. Augustine, City of God, XIV.13.

[625] St. Augustine, City of God, XIX.13. Brown, Augustine of Hippo, 323.

enjoys in his natural powers which enable him to discover, to learn, and to practice those arts. Think of the wonderful inventions of clothing and building, and the astounding achievements of human industry! Think of man's progress in agriculture and navigation, of the variety, in conception and accomplishment, man has shown in pottery, sculpture and painting; the marvels in theatrical spectacles, in which man's contrivances in design and production have excited wonder in the spectators and incredulity in the minds of those who heard of them; all his ingenious devices for capturing, killing, or taming of wild animals. Then there are all the weapons against his fellow-man in the shape of prisons, arms, and engines of war, all the medical resources…Man's skill in geometry and arithmetic, his intelligence shown in plotting the positions and courses of the stars. How abundant is man's stock of knowledge of natural phenomena![626]

Augustine's overflowing delight in human ingenuity is followed by further wonder at the ability of the abundant and beautiful creation to meet all the physical needs of humanity. The Heavenly City knows these gifts as pleasant consolations amidst the painful shadows of life in the present, tokens of the eternal rest and blessing in which it hopes. It rejoices that God scatters the blessings of ingenuity and created abundance on good and bad, knowing that these blessings are only a taste of the goodness of the Heavenly City which is Christ.[627] Augustine compares the inordinate love of the city of man for these created goods to the love of a fiancé who loves the engagement ring her betrothed has given her more than the betrothed himself.[628] Only the Heavenly City can recognize the concreteness and orderedness of the good things of creation while understanding that these gifts can easily become the focus of worship themselves if not continually relativised by the knowledge of the superior goodness of their Creator.

Gilbert Meilaender argues that by framing the discussion this way Augustine allows the divine gifts both to empower and free while making a claim on our gratitude. Augustine understands a gift to elicit gratitude to the giver and a respectful use of the gift, Meilaender continues. Such an understanding of the proper form of human gratitude does

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[626] St. Augustine, City of God, XXII.24. Cf. also St. Augustine, Confessions, XI.5.

[627] St. Augustine, City of God, XXII.21.

[628] Brown, Augustine of Hippo, 326.

not create rigid boundaries of use around a gift, but rules out uses of a gift which are clearly disdainful of it or counter to its purpose. Thus the obligation created by a gift is not a self-contained set of rules about its use but a freedom to explore its goodness within the broad limits of fidelity to the giver.[629]

Contemporary understandings of gift giving obscure Augustine's thought at this point. John Milbank clarifies Augustine's meaning in noting that gifts are in important senses inalienable from givers, and that in receiving a gift one is inescapably asked to receive the giver. God's gift to creatures is of themselves, and can therefore only be refused by suicide. A minimal return of the gift of creation is to refuse suicide, but a truly thankful receipt seeks to recognize the relationship that the gift has established. Thankful receipt of a gift, Milbank argues, seeks to strengthen and integrate the relationship with the giver by returning it, in time, in a different form. This indicates that the formation of serial relations is in fact the point of gift exchange, rather than the construction of a debt, which rather than building up a relationship, intrudes on it. Only as we enter into a relationship of free receipt and return do we experience the plenitude of God's gifts which makes generosity to others possible; and the church is the supreme engagement in gift exchange with the Creator because here humans repeat back God's life in Christ, returning it to Him with praise added.[630] Such an understanding of gratitude shatters the boundaries of duty language, and helps us to flesh out Augustine's focus on love by saying that gratitude is a specification of the love for God which claims, pervades, and shapes the Heavenly City.[631]

But a gift is only an offer until God overcomes the resistance of our sin, enabling us to take it up. As Rist puts Augustine's view, "God's love both commands man's obedience and gives him the strength to obey. Without God's help we are 'under the law' and will either fail to act rightly or pretend (through various rationalizations) that (in this

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[629] Meilaender, Practice of Virtue, 161-163.

[630] John Milbank, "Can a Gift be Given? Prolegomena to a Future Trinitarian Metaphysic" (Modern Theology, 11:1 January 1995) 132-137, 145-154.

[631] Meilaender, Practice of Virtue, 167.

case) the Law does not apply."[632] We began this chapter by discussing the relation of the center of the good to its outer boundary in Christian moral inquiry. That image helps us begin to grasp Augustine's understanding of the role of divine love in orienting and motivating human love. Free human love does not grudgingly respect the outer boundaries set up in God's good gifts while longing to forsake them. Instead, it yearns toward the center of the good, examining its boundaries only in order to learn how best to love, as it calls for the empowerment of God to do so.

The content of these boundaries is simply the order of God's gift of creation and redemption. Against this order, Augustine says, selfish desire throws up a self-serving counter-order, and our physical need projects yet another order, but reason tells us the true ordering against which these false orderings must be critiqued.[633] Augustine is not implying here, Rist explains, that natural reason is able to rightly order all things itself. Augustine understands the "rational" order of things to be established by the revealed truth that proper love for God includes proper love for our fellows.[634] To know the peace of this harmonious order humanity "needs divine direction, which he may obey with resolution, and divine assistance that he may obey it freely to prevent him from falling, in his enthusiasm for knowledge, a victim to some fatal error…so long as he is in this mortal body he walks by faith, not by sight. That is why he views all peace…in relation to that peace which exists between mortal man and immortal God, so that he may exhibit an ordered obedience…to the everlasting Law."[635] In this formulation the ordering of theological loci is assumed which I have insisted on throughout Part II: because humans are called by the Spirit and *redeemed*, they are given an *eschatological* vision of Christ through which to understand God's work of *creation*.

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[632] Rist, Augustine, 191.

[633] St. Augustine, City of God, XI.16.

[634] Rist, Augustine, 166-167.

[635] St. Augustine, City of God, XIX.14.

***Technology as Pride: A Society of Curiosity***

Augustine's clear view of the connection of love and limit, Meilaender explains, frames his definition of the sin of *curiositas*. Curiosity is not just an innocent itch to explore but is the Faustian lust for knowledge and power which overreaches *any* claims of limitation. Such *curiositas* is embodied in Foucault's neo-Nietzschean "rejection of everything in Western civilization that restricts the 'desire for power.'"[636] An Augustinian definition of *curiositas*, however, defines such sentiments as the prototypical sin. In modern usage curiosity denotes a positive character trait, an openness and freedom. Augustine too celebrates this openness to God's rich gifts, but would probably call wonder a more accurate descriptor of the positive content of the modern concept of curiosity. Far from rejecting the explorative pursuit of "useless" knowledge (which is part of delight and wonder), Augustine's concept of *curiositas* highlights the temptation to conflate the exploration of creation and human ingenuity in delight and wonder with a refusal to recognize that there are things that I cannot know because I will not do the evil required to know them.[637] For example, in the case of David and Bathsheba, David's sin was not the insignificant (from the neighbor's perspective) glance from the roof but the *curiositas* which led him to the intimate knowledge and finally the possession of his neighbor's wife.

Augustine insists on retaining curiosity as sin because he wishes to affirm that beyond certain absolute limits no good may come of human exploration. David, for instance, might have avoided the full playing out of his sinful desire to sexually posses his neighbor's wife by exposing and refusing to indulge that disordered desire. Yet David came to murder as part of the desire to experience the ownership and consolidation of regal power that the co-option of Bathsheba as a wife ensured. Similarly, modern technological practice may find itself bounded, for instance, by a refusal to explore the cloning of humans because the attempt to do so, under current scientific procedures,

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[636] Foucault, "Revolutionary Action," 221.

[637] Meilaender, Practice of Virtue, 133-136. For an early view of *curiositas* which focuses on sight see St. Augustine, Confessions, x.35.

involves extermination of embryos. Such a principle demands the true limitation of resources be squarely faced: moral limits reveal material limits.[638] Meilaender encapsulates Augustine's claim: "Our appetite for knowledge must always remain appropriate to those who are creatures. It must be set within limits and governed by the understanding that we seek not simply the enjoyment of seeing, but the truth of reality."[639] Augustine has already claimed that intellectual and practical exploration of creation are gifts of the Creator, only *becoming* vice when having no reason or limit, bounded neither by respect for others nor reverence for God.[640] Meilaender explains that for Augustine there are two vices of human exploration. The first treats the good of human ingenuity as an end in itself without limit. The second ties human ingenuity to a disordered end, a disordered love. It is this latter disease (which is not entirely separable from the former) which Oliver O'Donovan sees evidently embodied in a contemporary society which watches the appearance of new technology as a form of entertainment. When exploration of the technological frontier is the existential excitement of choice, *curiositas*, the love of ingenuity for its own sake, has become the sin of a whole civilization.[641] And as the Foucault chapter suggested, because this sin both enhances and is inflamed by the power of political authority, this unfettered desire for the extension of technological power and political power can be understood as the unified love which creates modern *societas*.

With Augustine's help we come to the point of defining technology as the pride of our age. Technology is sin when it becomes a way of life characterizable as the search for power and self-aggrandizement. It is sin when it is a way of life without limit, without wonder at the goodness of existing creation, without concern for the neighbor. Here desire (*concupiscence*) reigns, greedily making an empire of our wills.[642] The rapacious expansion of such concupiscence illumines the rapacious practices of empire building,

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[638] Meilaender, Practice of Virtue, 140. Or, the covenant reveals the basis of creation.

[639] Meilaender, Practice of Virtue, 144.

[640] Meilaender, Practice of Virtue, 150.

[641] O'Donovan, Begotten or Made, 9.

[642] St. Augustine, On Marriage and Concupiscence, chapter 30.

and vice versa. For both the constant temptation to evil lurks in the limitless and undisciplined desire. Augustine has brought into the light the dark and slippery slope of lust, at the bottom of which lies both the false corporate peace of the violent empire and the false individual peace of chasing insatiable desires. Furthermore, he contends that no one admits to such a lust because it is never possessed abstractly, but is always embodied in practical, mundane activities. We come one way or another to find "meaning" (as Pacey describes it) in technological behavior which, truth be told, we continue because it brings us a modicum of power, notoriety or selfish pleasure.

These patterns always come to us through inherited social forms which draw us into self-destructive habits. These may be wrong desires which shape our knowledge or wrong knowledge shaping our desires.[643] Augustine is quick to warn, however, that the corruption of materiality by the embodied rebellion against God which forms "carnal custom" is not the *cause* of our sin, but is the punishment for our making others' sins our own.[644] At this juncture Heidegger's and Augustine's points mutually illumine one another. Individuals are corrupted as they are born into the sinful practices of their progenitors, and individuals sustain and augment social patterns which likewise sully future generations by transmitting or transmuting the habits of pride into new forms. This is the theological implication of Heidegger's 'world': we come into existence as part of the social matrix of embodied dead ends, wrong desires, and punishments of the actions of our forebears. In saying this Augustine is not implying that materiality and enfleshment are themselves evil, but that when the good gifts of creation are misshapen to serve ourselves rather than God and one another, creation's blessing is masked by human sin.

When technology becomes the mode of the sin of pride we become comfortable with the denuding of the good perpetrated in the name of technological method, and *un*comfortable with placing limits on technological remaking. Such sensations are powerful diagnostic indicators of our loves and the lords who claim them. This is additionally revealed in the tenor of our love as the city of God acts in well-reasoned love and gladness, not from the fear of loss or pain. In chasing its desires and running from its

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[643] St. Augustine, City of God, XIV.2.

[644] St. Augustine, City of God, XIV.3.

fears, the city of man is kept either frantically active and in emotional upheaval or under the control of a steely pride, bent on reaching the peace of the flesh by living out its self-referential assessment of the proper ordering of the good.[645]

Here it becomes clear what was intended by delineating between moral deliberation about the "permitted" from deliberation about "permission." The Heavenly City understands the "problem" of technology to be the discernment of the proper human place within an ordered love of earthly goods and the flourishing of all creation. Conversely, the city of man considers the "problem" of technology to be how best to gain tactical advantages by its application. It resolves its conflicts of desire not by restraint but by the expansive acquisition of additional power. Augustine does not repudiate the expansion of power but limits its selfish acquisition by enjoining the selflessness of service, the confession of sin, and gratitude to God. Conversely, the city of man asks "How far?" only in order to discern and remain within the minimum proprieties of justice while still loving the self-aggrandizing power which is a constant threat to the proper relation of created goods.[646]

How amidst this widespread unfreedom does Augustine think we may find the freedom of grateful gift receipt and return? Despite the fact that materiality and sociality are the vectors through which our wayward wills are formed in sin, Augustine's basic defensive move is not to eradicate temptation by changing the social and material setting of human action but to reiterate the importance of the discipline of the soul. The decay of materiality springs from the waywardness of human will, and thus "The soul is conquered by itself."[647] Such a change in our desire for God may become an internal discipline issuing in external discipline which over time acts to reverse the ravages of sin on materiality and sociality.

To summarize the lessons learned by a study of Augustine's understanding of the two cities, we may turn to his own summary of the categories of human action provided near the end of the City of God. "[A]ll man's use of temporal things is related to the

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[645] St. Augustine, City of God, XIV.9.

[646] St. Augustine, City of God, XIX.13.

[647] St. Augustine, City of God, XIV.20-24.

enjoyment of earthly peace in the earthly city; whereas in the Heavenly City it is related to the enjoyment of eternal peace."[648] More concretely, "both kinds of men and both kinds of households alike make use of the things essential for this mortal life; but each has its own very different end in making use of them."[649] By exposing the form of life and the differing types of peace of the two cities, Augustine theologically illumines the role of our social embedding and provides a powerful theological framework to guide our perception of it and response to it. He suggests how the city of God can applaud the city of man in the upholding of created goods, and gives a basis upon which to recognize when that agreement subverts the ordering indicated by the eschatological end of peace. He has also illumined the critical theological insight that the short-sighted and greedy devotion to penultimate goods or social power as ends in themselves is the central fallacy of the city of man, leading to a false peace rife with injustice.

The institutions of society, like their members, are inevitably mixed entities, yet Augustine makes it clear that this does not warrant escapist politics, for social life is a created good of high importance. The city of God is bound to participate in human community though it is unavoidably fraught with evil. As it does so it suffers "heartfelt grief" for the torn nature of social life, in the knowledge of how life can and will be in the Heavenly City. Christians thus live as resident strangers, experiencing the tension, both social and moral, between the description of life as it is, broken and rent by selfishness (as Part I attempted to describe it), and as it may be in eschatological hope (as the previous two chapters have attempted to describe it). This tension will inevitably mean that moral ambiguity is a constant feature of obedient public action, especially as Christians forego the lesser good of homogenous though forced assent to the truth for the greater good of uncoerced but partially destructive social harmony.[650] The wandering citizen of the heavenly city, the *peregrinus*, is homesick for another world but in temporary dependence on the life around him. Thus, the Christian must be genuinely grateful for both the goods and task of life in society. As Peter Brown puts it, "the City of

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[648] St. Augustine, City of God, XIX.14.

[649] St. Augustine, City of God, XIX.17.

[650] St. Augustine, City of God, XVIII.1, XIX.4-6; Rist, Augustine, 252.

God, far from being a book about flight from the world, is a book whose recurrent theme is 'our business within this common moral life'; it is a book about being otherworldly in the world."[651]

### *Theological Ontology and Moral Deliberation*

But is Augustine otherworldly *enough*? Certainly Augustine's formulation of the questions which must be put to technological being makes clear the important roles played by desire and the love of the good in shaping human action. He is likewise helpful in portraying the destruction and disintegration wrought when desire turns self-referential. Despite having an insufficiently Trinitarian ontology, I will argue, he was nevertheless able to come up with a powerful set of insights into the dynamics of fallen social behavior. The preceding section drew out this strength by portraying the self destructive pride of the city of man as it applies to our topic. And while Augustine's solution, humility before God and His gift of created order, is correct, its formulation in terms of static relations of ordered hierarchies has a conservative ring about it which is rooted in his use of a pre-Christian ontology. That this conservative resonance is not endemic to the gospel will emerge in examination of Karl Barth's Trinitarian ontology.

At a surface level the theologies of Augustine and Barth mesh extremely well. Like Augustine, Barth understands the root of sin to be pride, or self-reliance and self-justification,[652] and as Michael Banner has persuasively argued, both theologians consider human humility before God to be the solution to the strife of the two cities.[653] At a deeper level, Barth, while interested in similar ethical questions, remedies two lacunae in

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[651] Brown, Augustine of Hippo, 324.

[652] This emphasis is as foundational to Barth's theological project as it is for Augustine, despite, or possibly because of, Barth's modern concerns with epistemology. Barth's extended study of human pride and God's redemptive response is tied to Christ's offices of king, priest and prophet. See Karl Barth, Church Dogmatics IV, The Doctrine of Reconciliation: Part 1, trans. G. W. Bromiley, ed. G. W. Bromiley and T. F. Torrance (Edinburgh: T & T Clark, 1956), para. 60; IV.2, para. 65; IV.3.1, para. 70.

[653] Banner, Christian Ethics, 241-242.

Augustine's formulation. Though commendable in desiring to explain how Christians are to be "otherworldly in the world," Augustine is hampered at critical points by an overly static ontology. By grounding his discussion within a framework of desire for the beautiful, Augustine's moral theology begs for the beautiful to be defined in God's action in the crucifixion and resurrection of Christ. Without having established this, Augustine's definition of God's beauty is built on strong conceptions of God's transcendence or on conceptions of God's creative work insufficiently integrated with God's redemptive work.

The implication of this oversight is twofold. First, when moral action is framed in terms of loving the eternal God, or as striving after the Christian's reward of presence with God in eternity, deliberation about human action is forced to cope with an insuperable gap between the eternal and the temporal. Second, because Augustine has not theologically explicated the work of God in overcoming this gap, it becomes apparent that he has not indicated in any detail how the Spirit might conform human action in the concrete present to the form of eternal life.

The upshot is that while Augustine is excellent at defining the state of sin in general, atemporal terms, he has little or no discussion of how good action must also be appropriate to particular time and place. This means that on the basis provided by Augustine's thought, whose chief lack is a developed pneumatology and a Trinitarian ontology, it is difficult to formulate a complete account of the activity of technological obedience.

Karl Barth's groundbreaking formulations in Trinitarian theology promise to remedy these intertwined deficits, yielding a substantive gain for our theological framework and our practical deliberation. Barth's founding assumption is that in revealing Himself in Christ, God reveals Himself as a reconciling God. God *is* this act, and thus what is eternally real is first and basically action having a certain Christ-shaped quality. In Christ, God's word and action are one proclamation of good news: Christ is God's definitive word in the form of a definitive action, which had reality before the

world and yet was for the world.[654] Christian life is that life which lives in humility from and toward this reality.

Two implications follow. Because God's reconciliation of humanity in Christ is the more basic event upon which created reality is founded, we are given a sharper view than that provided by Augustine of the insight that "eternal life" is *both* an end and a character of action in the present consisting in the human mirroring and participating in this event. Also, in order for human action to accomplish this, Barth contends, a more developed pneumatology is necessary because the Spirit is the possibility and the content of eternal life, the presence of the redemption of Christ in humans. Invocation of the Spirit must therefore be understood to be an essential determinant if particular, contemporary moral decision-making is to be shaped by grace.

Such a pneumatological definition of the ethical life provides a resource for defining technology as having a place within the life-form of obedience. Using the conceptual insights of Barth I will suggest the possibility that technology holds the promise of playing a role in our finding ourselves in the love of the other, rather than being only a temptation to denude the other in the extension of my own power. Going beyond, but taking up Augustine's definition of ordered loves as determinants of right action, Barth's work implies technology may be perceived as instrumental in a new way—as an opportunity or arena in which to find ourselves in service in particular and mundane ways.

## Trinity, Theology, Ontology and Ethics

While Augustine, as a pre-modern, does not make his methodological assumptions explicit, his discussion of the two cities assumes the essential unity of the discourses of theology, ontology and ethics. Having maintained the interpenetration of these fields throughout this study, this assumption is welcome even having indicated deficits in his account. Because Augustine's account functions as a unity, to address the

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[654] Barth, Church Dogmatics, IV.2, 209ff.

deficit of his ethic requires an engagement with and revision of his ontology which replaces his essentialist ontology with a more fully theological one.

In modern usage the doctrine of the Trinity has been used to make explicit what Augustine assumed by allowing ethics, ontology and theology to be seen in their essential and immediately apparent unity, claims Samuel Powell. "The doctrine of the trinity is not a theory about the eternal being of God but is instead first and foremost an account of God's being for us and among us… it is about the way in which the Christian God comes to us. It is about the way in which the Christian life is lived out by participation in the being of God."[655] Having attempted to glean the best insights of the patristic era through Augustine, I will now endeavor to draw out the best insight of modern theology, turning again to one of its most important voices, Karl Barth. Eberhard Jüngel's examination of Barth's ontology will provide a way into Barth's Trinitarian ontology, which will be followed by an examination of its ethical implications as portrayed in Church Dogmatics volume IV.

Barth defends an account of God's being which refuses to begin theology by assuming the commonsense perception of substance and working back to a first substance or prime mover theory in order to establish the nature of God's being. He decided instead (following Hegel) that God was most accurately known through His self-revelatory presence in Jesus Christ. John Webster summarizes this insight: "The crucial principle for an ontology of the divine is that God's being in and for Himself be conceived on the basis of God's revelatory action, which means on the basis of God's triune relatedness. God *is* the event of his self-gift as Father, Son and Spirit."[656] This affirmation emphasizes the essential unity between God's being and His historical acts which is more revelatory than the unity between the substances He has created and the substance of His being.

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[655] Samuel M. Powell, The Trinity in German Thought (Cambridge: Cambridge University Press, 2001), 261-262

[656] John Webster in the introduction to Eberhard Jüngel, God's Being is in Becoming: The Trinitarian Being of God in the Theology of Karl Barth. A Paraphrase, intro. and trans. John Webster (Edinburgh: T & T Clark, 2001), xviii.

This is not to deny that God can be known through His creative work, but affirms that this creative work is of subsidiary epistemic importance in relation to His work of making Himself known through the Word. Jüngel observes that Barth indicates this difference with the terms primary objectivity and secondary objectivity. In Christ God reveals His primary objectivity to be one which claims humanity as Lord, while in His creative work, His secondary objectivity, this claim is not so immediately and strikingly apparent.[657] In chapters four and five the claim of God's secondary objectivity (the church and created order) on human action was discussed in a form which affirms that God's secondary objectivity in its moral relevance can only be truly understood in the light of the claim of lordship inherent in God's primary objectivity. God's primary objectivity must be understood to orient our perception of God's secondary objectivity, making clear the way the doctrine of the Trinity functions in a hermeneutic role.

This claim can be restated by saying that God's self-revelation is the criterion of all ontological affirmations in theology, Jüngel concludes. Such affirmations, Augustine has rightly assumed, are not only allowed but necessary. The concept of revelation is in this way understood to control the concept of being. This is to affirm that God has retained the ability to interpret and communicate Himself through the Word to the creature, rather than emptying Himself into His creation in order to be accessible to the creature on its own resources. This implies further that because God is known in His redemptive action in Christ, this history is the criterion of all other histories in the same way the being of God is not in sequence with other beings but is an event against which all other events are measured.[658]

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[657] Jüngel, God's Being, 62. In The Trinity, Augustine relies much more heavily on God's secondary objectivity to define God's being, though not entirely without attempts to transcend it.

[658] Jüngel, God's Being, 77-79.

At the heart of God's self-interpretation is Jesus Christ, the Redeemer, in whom God and humanity are seen together alongside the overcoming of sin and death in the resurrection. Jüngel interprets Barth to be saying that the Christ event exposes the content of God's primal decision. Before humanity was created, God determined Himself to be Father and Son, and the Son was God's eternal decision to turn his face toward humanity, thus relating Himself to human history. Barth articulates this by saying that the covenant is the ground of creation. Because God has set up this covenant with humanity, He takes seriously the threat of the negation of humanity by sin, committing Himself in His Yes to humanity in Christ. This amounts to a commitment to divine becoming as part of engaging in the overcoming of the dissolution of being. God does not will this dissolution but upholds it, even as He abandons Himself to it in order to reclaim it. In Jesus Christ, hell, death and the Devil are defeated because God's being precedes and redeems non-being, a redemption definitively revealed and accomplished in the resurrection. Here the Father confirms the overcoming of death by the Son, and in this new divine correspondence humanity is included in a new correspondence with God. "In the resurrection of Jesus Christ humanity is given a share in the being of God which asserts itself against death," summarizes Jüngel.[659]

So for Barth God's being is what God does in Christ's life, death and resurrection. The yearning to define God's being more "concretely" is an artifact of western substance ontology. This means that the reality of human time is established in the accomplishment of this reclamation of evil, just as the redemption accomplished there constantly bears fruit as God elaborates this act in overcoming the sin of His people. It is the human place in this active reconciliation with which we are concerned in moral theology, making the question of this thesis: How do we participate in God's working to reconcile humanity to Himself in the light of the evil and redemption possible at the locus of technological activity? We have defined the darkness possible here in some detail, and yet we still ask:

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[659] Jüngel, God's Being, 103, also 90-93.

*How* do *we*, in this time and place, participate in its reclamation, judgment and redemption by God?

If we are to frame the question of good human action in a way that takes seriously the problems of discerning my *particular* obedience, Barth says, we cannot consider the atonement a hypothesis to be tested, but must admit that it is the *basis* of Christian reason. Theology, Christian theology, begins when Jesus is first seen not as a man but as the redemptive event of "God with us", ordaining in Himself the world to redemption, and *my self* with that world. In other words, redemption is known because it is experienced, and thus true thinking about perceptions of creation and the end of all things can be undertaken.[660] Clearly, naming God's being in a Trinitarian way has concrete anthropological significance because it makes part of God's nature this bringing of human existence into a definitive relation to His existence.[661]

Affirming that God exists as one who brings humans into His existence means two things immediately, says Jüngel. First, we do not know God as other objects, but He must let himself be known. Second, because of sin, God must make us fit subjects for this knowledge. Any knowledge gained of God can only be known because a human knower has been granted a share of God's own self-knowledge. At each moment the character of these transactions is *event*, God's *bringing* humans into communion with Him. This human communion, because it is not discovered by humans on their terms, is known only in faith, which assumes the awareness that humanity is different in kind from God.[662]

Because God brings humanity into peace with Himself, Barth believes we can say two further things about the human who knows God in faith. First, to know God is to know Him as *Lord*, and this knowledge immediately implies a concrete demand on human action. When a person in faith acknowledges his or her justification they acknowledge God's designs on their sanctification, which takes place not generally but in their life, as *vocation*. To know Jesus Christ as God, Barth says, "means that the being of

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[660] Barth, Church Dogmatics, IV.1, 3-21, especially 19, 90.

[661] Jüngel, God's Being, 69.

[662] Jüngel, God's Being, 58.

man *acquires a direction*, because it acquires a *destiny* and a *perspective*."[663] The great hope revealed in Christ's work is thus the font of the little, mundane hopes for redemption of daily life which founds ethical transformation.

Second, Barth is careful to say that this taking up of humanity into God's self-knowledge and work of loving in history does not imply the deification of the creature but is the fulfillment of human being which participates in the eternity for which it was made.[664] When humans do so, Barth says, they enter the kingdom of freedom.

> The kingdom of freedom is not one in which [man] can act as lord. It is not for him to act in it according to his own judgment. If he did, he would certainly not be free, he would secretly have left that place. It is the house of his Father, and he needs the Father's guidance to act in it and therefore to be free. But he receives and has this…It is a matter of learning to breathe and live in that freedom, of taking it with all seriousness.[665]

What is the work of that kingdom of freedom? It is the honor of representing the presence of God Himself. To participate with God's action as one under a Lord is to learn that God permits created reality to speak for Him, that He brings Himself to speech in humanity. In Jesus Christ God promises that other creatures too may attest God's reconciliation as His instruments and signs. We are partakers of God's history because in our temporality His once for all temporality is repeated in historical particularity. Jüngel encapsulates how God's being establishes this relation:

> As the mutual self-giving of the three modes of God's being, God's being is event. Because God's being as threehood is self-giving (love), this being may not be conceived as something abstract. When this happens it is not conceived as God's being. For 'being is actually something abstract only where it is abstracted from love.'[666]

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[663] Emphasis mine. Barth, Church Dogmatics, IV.1, 111; Cf. also 108ff.

[664] Jüngel, God's Being, 75.

[665] Barth, Church Dogmatics, IV.1, 100-102.

[666] Jüngel, God's Being, 41-42.

The content of this divine love that humans express is the same as its form: Jesus Christ. Their existence is no longer an end in itself and they have no option but to rise and follow Christ, being called and commissioned to "attest Jesus Christ in the world and among their Christian and non-Christian fellows."[667] They exist as a pilgrim people whose existence is not an end in itself but a public affair of mediating a Christ who is for all creation.

We are prepared now to make a summary statement of Barth's Trinitarian ontology as the unifying center of Christian ontology, epistemology and ethics. The resurrection of Christ is a noetic declaration and the ontic establishment of the truth of God's being and the reconciliation of humanity to Himself. To receive this declaration in faith is to be as altered as one raised from the dead. In such an alteration humanity is truly transformed in "thought and speech and action."[668] This transformation of human being through the processes of reconciliation which grounded the argument of the Wannenwetsch chapter is now revealed as *the* fundamental ontological truth.

> Prior to being conceived as the correspondence of mind and reality, truth would be understood Christologically as the event of a *saving interruption* of the actual connectedness of life, in virtue of which we are first able to grasp that the world *holds together* at the deepest level, though not through itself…God is at one and the same time the interruption of the coherence of being and its intensification; and, therefore, the correspondence between person (mind) and reality, which occurs in all true knowledge, means, in the case of knowledge *of God*, a gain to being which at the level of practice makes *more possible* in the actuality of the world than that actuality is capable of granting to itself.[669]

This shock and remaking of God's reclamation of humanity is the reverberation and recapitulation of the resurrection. Heidegger exposed the modern tendency to understand our true and enduring being as material conceived with the help of the thought picture of an object moving with inertia through space (with perhaps ordered energies

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[667] Barth, Church Dogmatics, IV.3.1, 344.

[668] Barth, Church Dogmatics, IV.3.1, 298-299.

[669] Jüngel, God's Being, 138-139.

being its more basic substrate[670]). But Christian faith claims that behind and sustaining any such claims about matter is a deeper truth: the resurrection of Christ. This truth was with God before the creation of matter, and Christ's resurrection shapes our perception of this reality not as an ideal object of thought but as a real, particular, historical occurrence. Here God makes definitive His hand in and over the most definitive event of world occurrence—death.

Whereas the mathematical image of a generically measured mass is too small to situate our perception of the multiplicity of world occurrence (the deficiencies of which Grant has pointed out), the resurrection is too big. It, Barth argues, "transcends its spatial and temporal limits. It must work itself out in another event, filling and controlling all other times and places."[671] To see the resurrection is to proclaim Easter as the day of all days, to expect the final day and the recapitulation and judgment of all things in this moment. The Easter moment, because it appears to us as a contradiction, is unsettling in a productive way, inviting us to expect and look for the presence of this new event which God wills in the contradiction and disorder around us. This crossing the border of death by God cannot but fly in the face of all other realities we experience. Creaturely life after death can only exist in the hand of the One who both created creaturely being and loved it enough to enter it, a singular truth, unmixable with any others, into which the community of faith is gathered and upbuilt.[672]

Again, it is important to emphasize that in order to do Christian moral theology, Barth says, the historicity of the resurrection must be understood as basic. First, at the theoretical level, this historicity establishes humanity as concrete, embodied being. We do not understand ourselves abstractly on the basis of principles because "Redeemed humanity has no history except that which is with Jesus Christ, and this means that man is interesting, or more accurately, real, in his concrete and historical confrontation with the

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[670] Werner Heisenberg, Physics and Philosophy: The Revolution in Modern Science, intro. Paul Davies (London: Penguin Books, 1989).

[671] Barth, Church Dogmatics, IV.3.1, 324.

[672] Barth, Church Dogmatics, IV.3.1, 310-313, 324-326.

living God."[673] Not only is humanity real only in his historical confrontation with a historical God, but the historicity of this confrontation impacts the shape of God's work in claiming His people for particular historical action. "He is special and different in each time and situation for each man, but he is never other than himself for any man or in any time or situation of any man. The multiplicity of his ways is endless, but his will and resolve in all his ways is one and the same."[674]

## The Promise of the Spirit

Having claimed that Augustine needed a stronger pneumatology, we can now indicate the pneumatological implications of Barth's Trinitarian ontology. Barth's pneumatology is irreducibly Christological. More specifically, Jesus Christ resurrected is the promise of the Spirit, who continues and assists to perfection that which is established and foreseen in the resurrection. By bringing the present Christ to life in individuals, the Spirit is the promise of the end which gives the Christian community its freedom. Thus the Spirit is the basis of *any* knowledge of God and provides the content of our *particular* knowledge of our being in Christ, our eternal life.[675]

Christians are free only where the Spirit of the Lord is, Barth continues, and that Spirit, again paralleling the argument of chapter four, is reconciliation. The children of God have peace because they live before God according to the "order of divine grace of reconciliation." This grace is brought to them and actualized in them by the Spirit as they put their bodies at God's disposal as a "living sacrifice."[676] Christian moral theology will always fare poorly in relation to all other moral theories without making explicit that God teaches and transforms His people through the guiding work of His Spirit, drawing them

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[673] Barth, The Christian Life, 19-21.

[674] Barth, The Christian Life, 18, cf. 13.

[675] Barth, Church Dogmatics, IV.3.1, 295-296, 351.

[676] Barth, The Christian Life, 23.

into knowledge and insight not humanly possible.[677] Methodologically, the implication is that Christian moral deliberation is not first about delimiting duties or rules, limits or even eternal commands, but is the act of listening, a negotiation. Here a demand is placed upon human action that it become mature in judging, acting and reconciling as it learns from its Father, who is teaching women and men to be Christ-like through the Spirit.

## Pneumatological Ethics

How does Barth understand moral deliberation to take place in this distinctive mode? Having spent two chapters talking about how God's secondary objectivity might situate and inform our moral deliberation, we can affirm with Barth the general claim that humanity's calling on God is an event corresponding to the event of God's making His grace to humanity known. Each individual case of this calling on God is a special case played out in the "light and power of the basic event between God and man in Jesus Christ, and totally determined by this event."[678] From the human side such an event not only assumes the sinful brokenness of human reason and desire but lives in their humble confession.[679]

This dialogical event between humanity and God is always and irretrievably dynamic. God's speaking and claiming hearers, Barth says,

> …is not the timeless truth of a general principle, or a collection of such truths, but the specific content of what is always a special event between God and man in its historical reality. Where and when it goes forth and finds an answer in man's obedience or disobedience, it is a precise and filled-out direction and not, therefore, an empty form that still needs filling out and preciseness. Special ethics, then, must resist the temptation to become legalistic and casuistic ethics. Its task is to point to that event between God and man, to its uncontrollable content.[680]

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[677] Barth, The Christian Life, 35-36.

[678] Barth, The Christian Life, 45.

[679] Barth, The Christian Life, 24.

[680] Barth, The Christian Life, 4-5.

The dynamism of this relationship implies a restoration of individual and collective vocation to a place of prominence in moral deliberation. It also means that for the believer seeking to act in faith, moral deliberation is fundamentally grounded in an asking which seeks transformation of the supplicant into something not yet graspable. Prayer in faith can only issue in transformation if it is asked without a specific answer being assumed beforehand.[681]

Thus the question, 'What shall I do?' asks about God's choice of the good today, the direction in which God makes this known so that it may be kept. It asks about the very concrete and specific form and manner of the action that God wants from man…Ethics, then, cannot itself give direction…Ethics, however, can point to the event of the encounter between God and man, to the mystery of the specific divine ordering, directing, and commanding and of the specific human obeying or disobeying. It can give instruction in the art of correct asking about God's will and open hearing of God's command.[682]

This, Barth says, is pilgrim theology, and despite the often-leveled accusations that it makes humanity a pawn in God's action[683] Barth contends that such waiting on God frees humans to take seriously the reality that our action must always proceed in the humility of not having all the answers. Barth, sharpening Augustine, argues that God's self-humility in Christ establishes our mandate to live this life of humbly calling upon God.[684] Because God *is* the commanding God, humanity is freed into creative and responsive obedience to the goodness of creaturely and redeemed existence rather than locked into the rigidities of rule-based conceptions of right action.

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[681] Barth, Church Dogmatics, II.2, 645.

[682] Barth, The Christian Life, 33-34.

[683] For this claim and its rebuttal see John Webster, Barth's Moral Theology: Human Action in Barth's Thought (Edinburgh: T & T Clark, 1998), and John Macken S. J., The Autonomy Theme in the *Church Dogmatics*: Karl Barth and His Critics (Cambridge: Cambridge University Press, 1990).

[684] Barth, The Christian Life, 8; Church Dogmatics, IV.1, 188-192.

To obey God according to static rules would represent a return to a "technological" mechanism which mounts attempts to manipulate God in order to achieve our own desired ends. Conversely, Barth says, the freedom of grace is not a static *not* sinning but a striving to live into a promise. The logic of pride is self-protective, but the logic of grace claims that only by living generously will we find a way forward out of death—the divine command is thus taken seriously as our life and freedom, a law of liberty. Barth encapsulates this insight by saying that there are no abstract good acts, only divinely given priorities for human action.[685] Because the task of moral theology is to try to understand the continuities of creation and human relations which God has upheld in His word and which thus claim human action, it must proclaim that all human action stands in relation not only to such truths, but is ultimately claimed only by God Himself. This claim stands or falls as He is faithful to be present with His church until the end of the age. Good action can only be that which coheres with its authority, meaning that its historical moment must be considered integral to any action's goodness.

On Barth's view special ethics (chapters four and five) is the human attempt to outline how God's action claims human action in particular spheres, and should be attempted only as a preparation for the project of asking about God's present work and His will for the community of worship and us as individuals.[686] Barth considers invocation to be the most incisive characterization of obedient human action because, "What God permits man, what he expects, wills and requires of him, is a life of calling on him."[687] Thus, Barth says, the command of Psalm 50:15, "call upon me", is the meaning of every command and the basic form of all human obedience.[688]

Christian moral deliberation, because it assumes a central role for the work of the Spirit, Barth concludes, is a living life form sustained in the act of comporting ourselves toward God with the question, "Lord, what shall I do?" To properly ask such a question is to consider what God has required of others in other times and places. In addition, I can

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[685] Barth, Church Dogmatics, II.2, 585, 703.

[686] Barth, The Christian Life, 7.

[687] Barth, The Christian Life, 44; cf. 37-43.

[688] Barth, The Christian Life, 44.

only ask "What should *I* do?" as part of the prior question "What should *we* do?", which acknowledges that we utter the question from within that circle of people also taken up into God's grace. Thus, "What should I do?" is the question of that community which does not expect the echo of the answer they have always given themselves.[689] "Man asks because he is asked," Barth says. I have argued that humanity is questioned by God in many ways, and have focused on God's querying of humanity in worship and in the boardroom. In each setting we are asked what our being will conform to, and the answer we give there flows out into our action and the actions of others in a myriad of ways.

### *Technology and the Trinitarian Life: The Promise of Technology*

To summarize what this chapter has gleaned from Augustine and Barth in tandem with Part I: 1) Every age has its own pride and lust as well as its overactivity and laziness which push it into destructive imbalances. 2) Every age has its own methods of gaining and exercising power, the shape of which helps us to define the directions in which it may be led by pride and lust, overactivity and laziness. 3) I have emphasized that modern technological practices represent a successful attempt to gain power over the material and social universes. 4) This method originated before the modern age, but became hegemonic in the modern age. 5) Thus our task is not to renounce the technological method but to look at the ways it tempts us to refuse to participate in or recognize God's reconciling work so that we may find its proper place within this work rather than indiscriminately applying it as overarching method. 6) We should expect that technological practices, because experienced as a route to power and meaning, will tend to take on an aura of divinity, tempting us to reach for *its* help rather than *God's* help, tempting us even to apply it to manipulate God.

What can be said on this basis about the promise of technology as part of the life of humanity which knows that its only history and reality is in Christ? First, we should not expect that any answer we give here will be as immediately graspable to natural

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[689] Barth, The Christian Life, 32.

reason as the definition we gave of technology as pride. Natural man is capable of grasping the presence of horror and degradation with a clarity it cannot achieve in trying to understand the life of faith from the outside. We should not expect a Christian approach to be translatable into the terms of other moral systems, though its practical recommendations may overlap with and inform these other systems. The Christian view of technology, because it is Christian, is simply itself, based on its own unique claims about the ground of all reality.

Because Christians affirm the Christ event as the ground of all reality they also affirm that technology has no existence independent of this ground. Moral theology can therefore only discuss those facets of the obedient life of God's reconciling kingdom which touch on the realms claimed by the technological way of life. Christians cannot be "technological" as we have described it, as a way of life, but can only criticize its overreaching its proper place in an *ad hoc* fashion by living the imperative of peace in sensitivity to the encroachment of destructive nothingness which occurs through capitulation to the technological imperative. Only as the expansive temptations of technology as a form of life are grasped are Christians empowered to take up this or that technological framework or artifact, always in readiness to criticize, modify, discard or embrace it in the light of their subservience to a superior mode of being.

What is the reconciliation of the technological? On a Trinitarian view, it is the re-establishment of communion, peace, and fellowship in God's love. As we have seen, a Trinitarian view of relations claims that I know myself as I am included in communion with God through His Spirit, which is to participate in His action of giving Himself to others. The I truly becomes a subject when the gift of God's inexhaustible grace is returned to God in trust that He will replenish the time, space, and skill which I have used to serve others. God is a God of communion, a mediated God, from whom we know that our true being is found in trusting, mediated, communion upheld in the promise "give and it will be given to you" (Luke 6:38). Augustine has noted that pride seeks to exploit relations by breaking up their reciprocity to serve the self, cutting off the possibility of others making a claim on me. But Barth's Trinitarian view is able with greater clarity to make the positive statement that Christ-like humility sees in relationality a forum for

service in which I find myself, no longer simply pretending to engage the other without receiving myself from them. The promise of the gospel is that by risking myself into God's work of reconciliation in the world as Christ did, God will restore and resurrect human brokenness from the inexhaustible well of His grace.

Here then we come to the root of the problem of technology, and thus the pinnacle of our analysis. This pinnacle is not separate from, but is the conceptual center of, the many particular examples given in the last two chapters. Both the way of being that is technology and the way of being of Christianity utilize conceptions of space, time and identity. The way of being in Christ conceives wholeness as the giving up of my search for distance in order to receive intimacy, and conceives the giving of time to be the consummation of the Christ-like self. The false promise of the technological way of being, and the root of its destructiveness, is its refusal of this faith in love for reliance on a mechanism which promises salvation by ridiculing the risking of self. It asks us to find salvation by controlling space to find intimacy, controlling time to find meaning, and seeking power over others to establish our subjectivity. Thus pride inverts the gospel, using a method to seize and control the communicative possibilities of our creaturely forms of material mediation in an attempt to extract that which can only be received as a divine gift. The freedom of the gospel is thus turned into law by pride, and the good becomes odious, to be escaped from into "how far" moral reasoning.

Technological life is marked by a style of manipulating the mediums of our communion with one another that is based on a lie. It is the mode of human action in which a method takes on a life of its own, severing our ability to think of any of our practices in their correct framework as service. Technology names the way of being in which humanity finds the idea of human life as service problematized because set within an all-encompassing project of control of the social and material. Fear and lust frantically try to gain control over the medium of communion while denying that our actions have repercussions beyond ourselves, an idiom of forgetfulness taking hold. At one moment pride denies its actions affect and thus harm others, at the next it seeks frantically to accrue as much control over the material mediums of communion with others as possible in order to effectively and efficiently control others' actions.

Such lies frame the promises of technologists to guarantee ever more intimacy through increased communication, information, and cybernetic control. No mention is made of the source of true intimacy, service and self-knowledge, which is to be really present by losing myself as gift into the other in faith in God that I will be renewed. This true intimacy is pushed away by the pseudo-intimacy of technology, this true time by "time-saving." It is thus a trick whose only means of defense is ridicule of the claim that true subjectivity is found in the sacrifice of self into the other. This sin, like every other, when confronted with difficulties of its own making, tempts us in time of trouble to reach ever again for the same lever of power, leading to a deepening spiral of sin, irrationality and absurdity, an ever more incisive self-isolation.[690] Conversely, creativity in the service of grace breaks this spiral by calling us out of ourselves into the interreliant and always risky communion for which we were created.

To see this polarity is to be sensitized to particular technological objects and their role in interpersonal communion. When technology is revealed for what it really is, having been lit up by the Easter event, this is what we see: like a word of blessing or a cup of cold water it is only an extension of an act of love. When this word or object comes between me and the other as a thing in itself, claiming its own solidity, when we begin to love *it*, then we are in the grip of penultimate loves which deprive us of both God and neighbor.

A focus on the circulation of objects as the medium of human relation helps us to see that our habitual textual or abstract mode of perception often misleads our analysis of technology. We assume, for instance, that 'economic indicators' are more real than our more basic material communion upon which those indicators are based. Heidegger grasped this insight by insisting that the basic level of human knowledge is the practical level of making and sheltering. As he made clear, the modern way of abstracting some information from its context-rich environment and privileging it assumes 1) the material world is conceived as purely non-specific and alienable, a standing reserve, and 2) this

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[690] Jacques Ellul, The Technological Bluff, trans. Geoffrey W. Bromiley (Grand Rapids, Mich.: William B. Eerdmans Publishing Company, 1990), 215-228.

standing reserve is to be used in an efficient manner, setting up the conclusion that it is the efficient use of the *medium* which defines good.

I contend that Augustine's and Barth's arguments dovetail in claiming that through grace and gospel we are freed from sacrificing others in our search for wholeness. Augustine has said that if society is not constituted in humble union under Christ's sacrifice it can only become vicious because an association of love is always an association of sacrifice.[691] With Barth's greater clarity about pneumatology and Trinitarian ontology we now see the full implications of the gospel's claim: we do not need to sacrifice others to maintain our foothold in this world. The church's true witness is to live within the breath of the Spirit, and thus without victims and sacrifices. As Augustine grasped, we can only live in our place in creation partaking in true (not destructive and obscuring) relations if we are freed from responsibility for making truth. Participation in Christ's sacrifice releases us from this cycle because we no longer need to force upon our fellow creatures the burden of becoming a substitute for God.[692]

Good human making is portrayed in the ark-building of Noah, who built the ark to continue his story with God and God's story of the redemption of creation from sin. God not only led Noah into this course of action but worked to inspire and direct Noah's all too human construction efforts as Noah "did all that God commanded him" (Gen. 6:22). Noah's building of the ark which sustained him, his family, and the animals through the swirling chaos of the flood is paralleled by God's participation in the building of the temple, through which the people of Israel were plucked from the tumult of the nations (Psalms 2:1). God inspired and upheld these human efforts as the form of His upholding His covenant with humanity. Here the making of artifacts does not drive *homo faber* against God, but is part of God's work of redeeming *homo faber* and all creation from the sin and chaos of pride.

In stark contrast, Jeremiah 10 summarizes the true problem of modern technology. Though the nations "cut a tree out of the forest and artisans work it with an axe, decking

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[691] St. Augustine, City of God, XIX.23.

[692] Christof Gestrich, "God Takes Our Place: A Religious-Philosophical Approach to the Concept of *Stellvertretung*," in Modern Theology, 17:3 (July 2001), 65-74.

it out with silver and gold…their idols are like scarecrows in a cucumber field and they cannot speak" (Jeremiah 10:3-5), they are in fact impotent, distracting us from the truth. "The gods who did not make the heavens and earth shall perish from the earth and from under the heavens" at the sound of the voice of "He who made the earth by His power, who established the world by His wisdom, and by His understanding stretched out the heavens" (Jeremiah 10:11-12). Technology *appears* powerful (as idols of gold and wood once did), giving the illusion that it possesses its own vitality and power. The Trinitarian clarification of this Hebrew insight is that when God is displaced from the center of our moral vision that which we make with our hands ends up becoming the form of our own self-isolation. "Those who make them are like them; so are all who trust in them" (Psalms 115:8). No matter how hard we try to make this self-alienation complete by pretending our creation is alive (paradigmatically expressed in the dreams of the makers of artificial intelligence), we will always in our prideful search for self-sufficiency be worshipping the broken ends of our communion with others. To see the Lord seated on a throne, high and exalted, filling the temple (Isaiah 6:1), is to know that God alone is worthy of awe, against which our ingenuity is relativised, put in place, made productive. Yet pride draws us magnetically to awe at the work of our hands. This is the true nothingness which is our sin, that the secondary, the subservient, has yet again claimed our awe.

Barth, like Augustine, is deeply aware that such idolatry leads to the evils of work, forgetfulness of the other, and greed. The real social explosive of our time, he says, is forgetfulness of the social character of work.[693] But under Christ's kingship a new order is revealed, in which God's leadership both gives and actualizes the freedom of the church and within it the believer. Christians use this freedom to revolt against the forces of disorder wherever they appear, wherever deviation from order threatens "human right, freedom and peace—of a life of people in fellowship of one another."[694] In short,

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[693] Barth, Church Dogmatics, III.4, 537-545.

[694] Barth, The Christian Life, 211. Though brief, it is unsurprising to find Barth's discussion of the technological "progress" spoken of within the rubric of the principalities and powers which contradict Christ's power.

Christians participate in God's action by revolting against power exercised to augment power itself rather than in truly sacrificial re-presentative service.

The three besetting sins of the technological way of being can be summarized by way of conclusion. The first we saw in Foucault, who rejected any good toward which human remaking of material and social order might be directed. The second is to believe in a shadowy commonsense notion of moral limits, but to have real faith in the law of fear and pride. Such faith, Augustine argued, is always trying to ameliorate its fears by pushing back limits in the search for self-protective tactical advantage. This sin is embodied in the "how far" question. A final sin is believing in God's action as the good to which human action must conform, but being too lazy or unimaginative to truly participate in this good. Our target is that slothful conservatism exemplified by Emil Brunner's comment that, "As soon as we begin to do anything we are bound to do it in the same way everyone else does it. Even if we are building a church our action does not really differ from that of those who build any other kind of building, both in the narrower technical sense as well as in socially technical relations (use of money, conditions of labor, etc.)."[695] Such sentiments repudiate the profoundly transformative possibility of the resurrection and its promise to generate ethical insights about avenues never before conceived.

Such obedience is always experimental, not in the sense of making up the rules as one goes or in creatively evading them but in finding new ways to be obedient to the promises we know.[696] The goal of this obedience is the renewal and superabundance of the creation as it is known in Christ. This being the case, on a Christian view the problem of modern technology is not that we manipulate the world in increasingly intimate ways, because in doing so the brokenness of the creation is also healed. This growth in the power to heal and restore life can only be applauded wholeheartedly by Christians as an unvarnished good. But if the power to manipulate creation grows, so does the temptation of technology to become an end in itself, or to be harnessed to fear or lustful ends making

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[695] Emil Brunner, The Divine Imperative: A Study in Christian Ethics, trans. Olive Wyon (London: Lutterworth Press, 1937), 245.

[696] Barth, Church Dogmatics, II.2, 598-601.

it destructive. Understanding the problem in this way we can see that the answer to the properly theological question of technology is not to be against all technology but to be continuously wary of our own modes of power, which perpetually tempt us to apply them beyond their proper limits, in rejection or ignorance of God's revealed peace.

It will have become clear that such an understanding of technology is not interested in a facile protest against the whole of modern society in favor of establishing a pre-industrial utopia. On the other hand, the worship of the Christian God places modern technological modes of being under legitimate and sustained attack at almost every turn. Because Christians follow a God who transforms humanity, they refuse the snobbishness which protests change simply *as* change. Such a position means that the church must avoid embroilment in the purely aesthetic derailment of political decision-making by vague perceptions such as "too big" or "too fast", which are marginal at best and unresolvable at worst. For the Christian, change itself will require neither protest nor comment. What *does* require comment is a change in the life of society coming under the sway of an impoverishing lord. This may mean praise for new capacities for justice and material bounty or protest of the denuding of the good by new practices. In short, this protest will always be that engagement in the routine questioning of the form of society which has long been central to Christian engagement with society. The church may function at times as a force promoting social cohesion or a critical force, but must always act in service of its Lord. This means it must not allow itself to serve the integrative or critical projects of other lords, while preserving the possibility of cheering or joining in non-Christian public movements which serve the public good as theologically defined.

The implication of this analysis is to highlight the importance of *Christian* moral creativity. At minimum, the affirmation of the importance of moral creativity indicates that by working within social structures as they exist in their evil state they are subverted as ideology by our refusal to participate in them in a spirit of slavery. Emil Brunner draws our attention to the commonplace patristic claim that a *Christian* shoemaker might work within standard economic practices of his guild, but his doing so will always subvert these practices by breaking their rules in light of a desire to better serve the neighbor

before God.[697] O'Donovan points out that such a resistance was practiced by the earliest church, who by living joyfully into the created order recovered from oppressive and exploitative corruptions to which it was subject. Slavery, for instance, was undermined as the Christian conception that slaves and masters were on equal footing before God took hold. This historical moment began the slow collapse of such forms of exploitation, but this historical moment was an expression of its actual defeat in the death and resurrection of Christ in which exploitation was finally abolished. The New Testament community affirmed this change in status, thus participating in the tide of grace which eventually swept away the caste understanding of slavery.[698]

Such subversion can also be understood as an active moral creativity. Stanley Hauerwas commends a form of Foucauldian micro-resistance which explicitly recognizes the multiple levels at which Christians may resist the impoverishment of society.[699] Micro-resistance depends on a model of human action we have utilized throughout our study in which private and public action are seen on a continuum and which allows creative resistance at many levels and in diverse ways, through speech, thought and action which seek to reverse destructive trends at any point in lived existence.

We must also keep in mind with Barth, who uses the relationship of Saul and David as a paradigmatic case, that God's work is not confined to cooperation with His servants but may also include working through those who are in rebellion against Him.[700] Barth's point is that God is Lord over both cities, whether they knowingly rebel or unwittingly obey. God is the lover of both, loving even the lepers, and thus "He is favorably disposed to the pure only in order that they may be at His disposal for service to the lepers."[701] Barth's central points recapitulate those of Augustine. First, the elect and the rejected only differ in their reliance on grace. Second, the elect are only elect to take this message to those who reject it. Finally, to take the message of grace into the world is

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[697] Brunner, The Divine Imperative, 259.

[698] O'Donovan, Desire of the Nations, 184-186.

[699] Hauerwas, In Good Company, 134-135.

[700] Barth, Church Dogmatics, II.2, 355ff.

[701] Barth, Church Dogmatics, II.2, 407

not to join with the unregenerate but, while maintaining a distinction, to cry out for a unity of the two cities under grace while being aware of the siren song of pride.

Christians above all should be able to participate in society *for* society, renouncing the simple service of self-interest. They see that in asking "how far?" there is no safety, only unrest, disquiet, and dissolution. Because Christians have faith that creation has a meaning, they will always be the solution givers, understanding the world and its powers better than it understands itself. The church's task is not coterminous with this political task, but includes the political task. Because they have established their lives in the unshakable assurance of their Father, they are "surrounded on all sides by absolute and unshakable peace. And it is not to ask too much of them, nor is it asked in vain, that even outwardly they should be and become messengers of peace."[702]

Having argued with Augustine and Barth that technology can be understood as an important part of the form of life of the city of man, this chapter has called for a renewed appreciation of the relation between the lived life and God's work of redeeming a broken creation. Its basic claim is that in claiming our whole way of being, technology serves our prideful desire to make meaning and can only be met by a renewed appreciation of God's gifts and God's work in time. This claim drew out some of the relationship of chapters four and five as it completed the argument of Part II.

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[702] Barth, Church Dogmatics,, II.2, 732. I have changed the singular pronouns to plural in this quotation. The fair trade charity represents one of many examples of the church serving as a catalyst for movement against the normal mode of economic imperialism, which it then sets afloat in secular society.

# Conclusion: Dwelling and Ethos

One thing have I asked of the LORD,
that will I seek after;
that I may dwell in the house of the LORD
all the days of my life,
to behold the beauty of the LORD,
and to inquire in his temple.
For he will hide me in his shelter
in the day of trouble;
he will conceal me under the cover of his tent,
he will set me high upon a rock.

Psalm 27:4-5

## *Artifacts as Embodied Ethos*

Demetrius' meeting with his fellow Ephesian silversmiths turned out to be an exciting event indeed! Continuing the biblical story of Acts 19 with which the introduction began, we find Demetrius' irritation grown to anger and his anger to murderous incitement against Paul. Paul's "crime" was proclaiming Jesus the Christ, so debunking the god Artemis. This amounted to an attack on the silversmiths' livelihoods and their international fame, and Demetrius' inflamed speech to his countrymen laid bare the implicit threat of Paul's claims about the Christ, to such effect that the city's whole population was stirred to riotous anger.

By proclaiming the name of Christ Paul called their god to account, touching the sore truth that their god needed the protection of human effort, belief in whom was sustained by a familiar cocktail of religious, economic, and nationalist beliefs overlaying a deeper pride and a desire for collective security. Might we construe Paul's action as objecting to their work because he believed the Ephesian silversmiths actually *were* making little silver gods? Of course not, he writes: "Indeed there are many 'gods' and many 'lords'—yet for us there is one God, the Father, from whom are all things and for

whom we exist, and one Lord, Jesus Christ" (1 Corinthians 8:5-6). Rather, his objection to their practices of manufacture was an implicit moral corollary of his attack on *any* manufacture of divinity, any human grasping for control of fate. He objected to the social significance of their making of silver figurines within the local context and in relation to social expectations of the cult of Artemis. He made this protest because he saw the city's peace as an unstable and chaotic peace at best, a peace augmenting and upholding a claim that Artemis was the proper route to secure human well-being, power, and security. The deficit in the silversmith's work was in particular the making of idols, but was at a general level that pride and self-interest which takes up the flags of religion, nationalism and livelihood. Thus the problem of the Ephesian "ten men" group is strikingly similar to the problem of our modern "ten men": both pursue their work at the center of a society's self-salvific quest for power and meaning, and thus both suffer the temptation to the delusion that they can deliver it. The main difference between the two groups is that the modern group reaches for a method as talisman, the technological imperative, which only later becomes the representative and objectified physical object, while the silversmiths were fabricating the talisman more directly.

We return in conclusion to the ten men discussion, to summarize how the affirmation that God is reconciling the world to Himself completely shifts the parameters for moral deliberation which both the users of TA and the Ephesian silversmiths assume. In grasping the ethos of worship the problem of modern technological being is exposed, its inability to see the forest for the lumber is glimpsed as one manifestation of a spiritual syndrome affecting all humanity.

This study's assessment of the practices of the ten men can be made more explicit by way of a brief summary. The introduction traced contemporary forms of action and thinking as revealed through the form of moral deliberation (TA) utilized by a ten man corporate board. Part I followed Heidegger and his interpreters' arguments that contemporary deliberation about new technology as indicated in the example of TA is bereft of the resources to escape an unwitting replication of the technological imperative and in doing so denudes legitimate goods. Part II developed the claim that the good news of Jesus Christ is that in Him humanity is offered another grammar, another logic, our

true teleology. This new grammar of living is not one which seeks a better route to more properly acquire "new" technology, but is a recontextualization of our moral deliberation by highlighting the question of what, theologically understood, it might legitimately be said to serve. The radical re-envisioning of the context of moral deliberation indicated by the gospel message suggests a new richness of possibility for moral deliberation about human making, oriented by a theological understanding of its proper shape and priorities. Augustine warns us against utopianism here: there will always be an eschatological tension in practice. Even if any given ten man group comes to inhabit an ethos of service, it must always be content to bring the possibilities of service to life amidst a contemporary society which is hostile to it. We might rather expect conflict to inevitably begin *within* such a ten man group long before it tries collectively to live the life of service amidst the wider society.

This study has not offered a replacement of one logical method or practical program with another equally concrete proposal, but has analyzed standard ways of deliberating about new technology in the hope of exposing the contemporary form of our illegitimate and inevitable pretensions to self-love. Those pretensions, Kierkegaard rightly observed, are so hegemonic as to be invisible to us, and "When this is the case, the art of being able to *communicate* eventually becomes the art of being able to *take away*, or to trick something away from someone…When a man has his mouth so full of food that for this reason he cannot eat and it must end with his dying of hunger, does giving food to him consist in stuffing his mouth even more or, instead, in taking a little away, so that he can eat?"[703]

Taught by Heidegger and his interpreters, this study has listened closely to the intimations of deprival in order to expose the pretensions of the technological imperative. From this cleared ground I attempted to point to a theological framework of terms which enabled faithful action to appear in its living vibrance. Whereas the contemporary context is prone to assume that Christian faithfulness is straightforwardly congruent with the salvation promised by the technological imperative, the thought of Part I, by undermining

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[703] Soren Kierkegaard, Concluding Unscientific Postscript to *Philosophical Fragments*, vol. 1, ed. and trans. Howard V. Hong and Edna H. Hong (Princeton: Princeton University Press, 1992), 275.

this assumption, opened up the space to imagine how human action and speech might express a different sort of being. This study has proposed that this being is best understood as centered and established in the redeeming being of Jesus Christ.

Restating the purpose of the study in theological terms, the meeting of the ten men and the gathering of the congregation in the house of God have been understood as important contexts in which human life is questioned, and must give answers which define us as beings. In worship we are questioned about the form of our life with *God and* creatures, while TA sets up a questioning which assumes that humans *construct* all houses, all relations, including the church. Yet in the house of worship we are told that proper housing can only be continually *discovered* amidst a bountiful and sufficient creation. That this is the case, that all our making, technological or otherwise, is about discovering the resources given by God to sustain our creaturely lives, can only be a confession. In confessing God as Creator we confess that we need neither search for, nor fight against, our compatibility with nature, but like Noah and the ark our work is part of our seeking to continue our material lives so that we can continue participating in the story of God. This is the ethos of worship in which human practices play a small but nevertheless glorious part in God's redemption of a broken creation. In the house of worship we hear, learn, enact and confess this word, which is the indispensable condition for escaping the ethos of technology. I have suggested in chapters four and five some practical implications of such claims.

There is a clear sense in which the procedural logic of TA most clearly represents the formalist logic of decision-making of modern society, yet we might easily have chosen other levels of social organization than the boardroom from which to analyze our shared moral climate. This is true, I have argued, because the guiding logic of the discussion which takes place in the boardroom is both a product of and perpetuates patterns of life in wider society. The decisions at the center of political authority which is the boardroom is one important but by no means unique point at which humans decide to confirm and entrench the social and material fabric of society along the lines of the technological imperative. The decisions made here rest on a firm certainty about society's behavior which TA assumes as a basic variable in decisions about technological

development. Thus we can see that the decision of the institutional steering committee is just one of a myriad of points at which "logical action" retains its publicly familiar shape. We must not naïvely think that the "problem" of technology is solved in the corporate boardroom, because the subconscious desires and wrongly oriented knowledge which subvert the manager's action also subvert our own.

Returning to our opening chapter, three main differences between TA and Christian love emerge. The first is that, in contrast to the goals of TA, institutional survival is not understood in Christian theology to be the telos of *homo faber* nor even a human responsibility. Second, institutional survival is not only an artifact of God's blessing rather than human action, but Christians (unlike the users of TA) have been told through revelation that there are moral commitments which cannot be violated even to save an institution. Christians confess that such boundaries sustain ever-new and transformative interpretative innovation. These absolute prohibitions, however, are not the heart of Christian theology. This means that, third, Christian theology (unlike good action as understood within the framework of TA) has a rich and multi-faceted vision of the ordering of ends which right human action serves, and is thus able to give a more fine-grained analysis of the negative and positive aspects of proposed action. The contrast between the two thought worlds can be crisply summarized. TA has only one inviolable prohibition: Thou shalt not undermine the survival of the institution, or stated positively: Thou shalt protect your own institution by ceaselessly expanding those "resources" under your control. The Christian community has one inviolable claim upon it: Thou shalt love the Lord thy God and your neighbor as yourself, or, stated negatively: Do nothing which harms your fellow man. The promise of Christ is that the embodying of His love makes possible a freedom and free innovation far beyond action springing from the compulsion to expansion driven by fear.

In sum, the promise of the technological imperative in modern society fits the classic definition of that offered by a god, principality, or power. The response offered by this study has been to scrutinize its claims, to study this god's powerlessness to deliver on its promises as typified by the dilemmas at the locus we call "new technology". Foucault's discussion of problematization spurred the theological insight that our

disappointment with our false gods provides an opening for a new and purer devotion to the service of the true God's work in the world. Through the case study of the moral deliberation of the "ten men" we have exposed the relevant claims of the technological imperative, so that we may, in Augustine's words, demote the worship of the penultimate goods of human ingenuity and work to their proper place before the ultimate good, God. This is not to dismiss as useless empirical analyses like impact analysis, but to insist that their proper remit is to bring to explicit knowledge information which should be taken into account by a non-proceduralist, non-consequentialist, theologically-informed mode of moral deliberation.

***Obedience, Not Results***

If the technological hermeneutic is as hegemonic as has been suggested, then Kierkegaard is also right to warn,

> It is said that were Christ to come in to the world now he would be crucified again. That is not quite true. The world has changed, it is now situated in 'understanding'. So Christ would be laughed at, treated as mad, but as a madman one ridicules…[704]

Augustine, Barth and Wannenwetsch have insisted that such ridicule and our own moral confusions are an ineradicable part of obedient human action in this time between the times. This ought not surprise Christians, says Richard Hays, as "Jesus' death on a cross is the paradigm for faithfulness to God in this world." The essential point for Christian moral deliberation, he says, is that "our actions are therefore not judged by their calculable efficacy in producing desirable results but by their correspondence to Jesus' example."[705] We are always being given up to death so that the life of Jesus may be made

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[704] Soren Kierkegaard, Papers and Journals: A Selection, trans. with intro. Alastair Hannay (London: Penguin Books, 1996), 49 X I A 187, 376.

[705] Richard B. Hays, The Moral Vision of the New Testament: Community, Cross, New Creation. A Contemporary Introduction to New Testament Ethics (New York: Harper San Francisco, 1996), 197.

visible in our mortal flesh.[706] In this way the church embodies the power of the resurrection in a world still being redeemed. Against the animosity this arouses in the world, Paul says, "Our sole defense, our only weapon, is a life of integrity, whether we meet honor or dishonor, praise or blame" (2 Corinthians 6:7).

This study has attempted to draw out two implications of this theological affirmation for Christian moral deliberation. First, because human action takes place in a world whose redemption is still being actualized, human commitment to participate in God's reconciling action always stands amidst our own and others' mixed motives. The two kingdoms battle within and around each individual; because reconciliation is historical God's work will be met in each human by a dynamic struggle between a partial acceptance and a partial rejection, a tension sustained only by God's working in us.[707] This means that the believer can only act rightly in the faith that he or she has made the attempt, however inadequate, to accompany God's working. The weight of our analysis has focused on setting out as clearly as possible the priorities to which obedience seeks to be faithful, rather than relying on consequentialist reasoning in the examination of outcomes, though we have seen that the effects of our action are not irrelevant to proper moral deliberation.

Second, the ambiguity of such a life breeds not fear but humble faith that redemption is the outworking of Christ's power over all things. By taking on the role of follower the believer is delivered from the burden of ensuring God's triumph and the defeat of this age's powers.[708] This does not mean that life becomes suddenly frivolous or detached, but indicates how the Christ-sign set up over this time and our lives means something more and different to the eyes of faith than to the non-believer. To truly hear this word is not only to hear but to repeat and accompany it with our own all too human chorus. This makes Christians great, Barth points out, because in doing so they are made part of Jesus' fight against darkness and for humanity. But it makes them small because they are shown the domination of sin and the bondage of humanity which exposes the

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[706] 2 Corinthians 4:11.

[707] Barth, Church Dogmatics, IV.3.1, 191-196.

[708] 1 Corinthians 3:21-23.

monstrous demand made on them should they side with Jesus in His fight. "Who has such deep and necessary cause for sighing as he who has received the promise of the Spirit, in whom it is already fulfilled, who knows what others do not yet know, namely, that Jesus Christ alone is the hope of the world and therefore his hope, to whom the positive sign under which we may exist here and now is known and not merely imposed, who is thus permitted but also required to live with this knowledge?"[709]

Yet, Paul encourages the church in Romans 8:31, "If God be for us, who can be against us?" This affirmation, Barth suggests, is precisely what makes the Christian life difficult and glorious, and therefore "possible, necessary and meaningful in this time. This is what makes him in all circumstances a positive man."[710] In relation to our topic, I have suggested that this positivity has the effect of releasing human action from the reckless or paralyzing fear of tragic outcomes which demand human work shoulder the burden of ensuring salvation. Truly obedient action becomes possible in the realization that human freedom is being released from solemn self-salvation into the joyful and playful yet bittersweet enjoyment of God's good creation.

Only on these terms can Christians celebrate with Augustine the ingenuity of the human mind that issues in fantastically creative technologies. He sensitizes us to the goodness of human ingenuity and gifts of creation, insisting that the two *can* come together in the creation of good and beneficial technologies. From him we discern that our final position on technology must be that, like all human ingenuity, science as an abstracting logic has its proper, quite limited, place but must not become an all-inclusive metaphysic. Having had our certainties shattered by a vision of the reconciling God-man, we see that the methods of technology must be considered from within a love of the material creation, of our own bodies as gifts, and of the preciousness of social relationships which emerge from the command to the church to be reconciled with one another. The recognition of such divine gifts gives structure to joyful action, providing creativity with direction precisely by taking creation to be a good gift of God and

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[709] Barth, Church Dogmatics, IV.3.1, 366.

[710] Barth, Church Dogmatics, IV.3.1, 367.

therefore gospel—the good news which permeates the things we touch and see, and the people with whom we converse.

If human work understands its meaning as grounded in the unique truth of Christ, it will at times resonate with the goodness in the human work around it, but will invariably do so in a way that what it embraces and rejects will appear inexplicable from the perspective of the technological imperative. This is because, I have argued, the Christian way of life is *sui generis*. Therefore the Christian No is at times a Yes to something which reaches the same goal as the non-Christian, and other times it is a categorical repudiation of such goals. But primarily, Christian naysaying will be peripheral to the desire for and a practical vision of an embodied Yes to the good of society, a Yes embodying Christ's Yes to the human race.

Kierkegaard, the master of God-fearing self-suspicion, sums up well the danger of conceiving Christian moral deliberation this way: "The wrong path lies all too close, wanting to reform the world instead of oneself, and just designed for uneasy minds with much imagination."[711] To forestall such hypocrisy, the only proper resolution of the problem of the technological imperative must lie in the desire to be involved in the experimentation which is attempting to learn the logic of grace in every facet of our lives. As the knowledge of grace spreads from one area of life to another, beginning with one insight grasped close to home, it will eventually become real in our work, at some point "walking to work" becoming "changing the kind of work you walk to."[712] Tackling larger, more social battles can only be a process which is attentive to particular circumstance and the leading of conscience and the Spirit. Such engagement in the workplace, for instance, may mean insisting on simple things such as institutional honesty, or might entail more active questioning of practices like budgeting the reformulation of "the skeleton of the [institution] stripped free of all ideology."[713] In both personal and corporate realms the experimental quality of the life of grace might also

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[711] Kierkegaard, Papers and Journals, 49 X I A 513, 393.

[712] Pacey, Meaning in Technology, 216.

[713] Richard Swedenberg, Schumpeter: A Biography (Princeton: Princeton University Press, 1991), 95, quoting Rudolph Goldscheid.

cause us to reconsider practical modes of self-inquiry such as that proposed by Langdon Winner.

One conceivable approach to tackling whatever flaws one sees in the various systems of technology might be to begin dismantling those systems. This I would propose not as a solution in itself, but as a method of inquiry. The forgotten essence of technical activity, regardless of the specific purpose at hand, will be revealed by this very basic yet, at the same time, most difficult of steps.[714]

We might also inquire into the systems designed to accelerate and protect the momentum of the technical imperative, such as trade and patent law. These are just a few of the possibilities open to creative faithfulness, by no means an exhaustive list, but offered as an indication of what practical possibilities opened up through the humble exploration of the logic of grace.

### *Taking Hold of the Life That Really is Life: Dwelling in the House of the Lord*

The promise of the Christ event is that as humans act in faith they are freed from their own self-contradiction by ceasing to contradict God. By studying technology we have seen many indications that in Christ the "myth of labor-saving"[715] may have its hold broken, liberating human action from consuming itself in the name of its own power. Such liberation, we are told in the resurrection of Christ, frees our work from fear and slavery to ourselves, handing it over to the life of service to do much greater things, in confidence that we will "see the goodness of the Lord in the land of the living" (Psalms 27:13).

Augustine's narration of the church's struggle for faithfulness is also that of the aged Paul in the first book to Timothy. Our gain, our eternal inheritance, is "great gain in

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[714] Winner, Autonomous Technology, 330.

[715] Winner, Autonomous Technology, 204.

godliness combined with contentment" (6:6). This contentment, Paul reminds us again, transvalues our prideful ideas about power, exposing the pretensions of scarcity which pride perpetually holds up as the basic force of the universe. Yet, Paul says, in Christ creation is known as benefit, and power is revealed to be given for service to all. Thus Paul exhorts the powerful, "As for those who in the present age are rich, command them not to be haughty or to set their hopes on the uncertainty of riches, but rather on God who richly provides us with everything for our enjoyment. They are to do good, to be rich in good works, generous and ready to share" (6:17-19). This, Paul informs us, is the "life that really is life" (6:19), born in God's action and ratified by our baptism. He exhorts us in conclusion, "Fight the good fight of faith; take hold of the eternal life to which you were called and for which you make the good confession in the presence of many witnesses" (6:12).

Humans can achieve such confidence only by dwelling in the shelter of God's imperative word—Sabbath—which is the transformative reality of eschatological justice. To contemplate such a theme is to face a demand for response, either committing ourselves to it or standing back "objectively" without commitment.[716] We have not the faith to "produce" such an ethos on our own, Bonhoeffer points out, to which

> Jesus says: "First obey, perform the external work, renounce your attachments, give up the obstacles which separate you from the will of God. Do not say you have not got faith. You will not have it so long as you persist in disobedience and refuse to take the first step."[717]

Because the Spirit is establishing such faith and such an ethos, Augustine knew that the heart of the biblical message is the promise that God is establishing the city of God and will protect it among the kingdoms. In faith that it is the recipient of this great gift of grace, it becomes possible for the church to dwell in stillness in the house of the Lord, even as its hands and feet explore the good creation to find suitable forms for its

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[716] Barth Church Dogmatics, II.2, 659-660.

[717] Dietrich Bonhoeffer, The Cost of Discipleship, trans. R. H. Fuller and Irmgard Booth (New York: Collier Books, MacMillan Publishing Company, 1949), 73.

material life. Such a community of worship finds its life in the prayer that God may in His mercy complete that good work which He has done, redeeming us from our evil desires as we seek in faith to become useful partners in His joyous work of reconciliation.

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